

**Town of**  
**Johnstown**

**Water and Sewer Rate and Fee Study**

Draft Report / November 1, 2023

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November 1, 2023

Ms. Mitzi McCoy  
Deputy Town Manager  
Town of Johnstown  
450 S Parish Ave  
Johnstown, CO 80534

**Subject: Water and Sewer Rate and Fee Study**

Dear Ms. McCoy,

Raftelis is pleased to provide this water and sewer rate and fee report prepared for the Town of Johnstown (Town). The primary purpose of this study was to ensure the financial sustainability of the water and sewer utilities and ensure that rates and fees recovered costs proportionately across all customer classes. This study includes the following for water and sewer utilities.

- 10-year financial plan cash analysis to determine the level of revenues to meet annual expenditures
- Cost of service analysis to allocate costs proportionately to customer classes
- Design rates based on the preferred alternatives
- Review and update the water and sewer tap fees to capture cost to reserve capacity in the system for new development.

It has been a pleasure working with you, and we thank you and the Town staff for the support provided during this study.

Sincerely,

A handwritten signature in black ink that reads 'Todd Cristiano'.

**Todd Cristiano**  
*Senior Manager*

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# 1. Executive Summary

## Introduction

The Town of Johnstown (Town) provides service to approximately 5,600 water and sewer customers. The Town is financially self-sufficient, funding for capital and operating requirements derived primarily from rate revenues and tap fees. The Town authorized this study to ensure that an adequate level of income from water and sewer rates is maintained to finance daily operations, tap fees are sufficient to fund growth-related capital, and rates that are fair and aligned with the Town's goals and community values. This study included the development of:

- Separate water and sewer financial plans for the 10-year study period, 2023 through 2032.
- A water cost of service analysis to determine the cost to provide service to each customer class.
- A review and update of water and sewer tap fees

Raftelis used industry standard methodologies supported by the American Water Works Association (AWWA) *Principles of Water Rates, Fees, and Charges* M1 manual and the *Water Environment Federation Manual of Practice 27* (MOP27) for this rate study.

Appendix A contains the tables which detail the financial plan, cost of service, and rate design analysis for the water utility and Appendix B contains the detailed financial plan plans for the sewer utility.

## Assumptions

This study is based on numerous assumptions. Changes in these assumptions could materially affect the study findings. Raftelis incorporated the following key assumptions into the study:

- The test year, or the year new rates will be in effect, 2024.
- The study period forecast is for 2023 through 2032<sup>1</sup>
- The Town provided growth projections for the 2023 through 2027 period based on the anticipated number of new single-family equivalents (SFEs). Tap fee revenue 2028 through 2032 was kept consistent with 2027 projected tap fee revenue to be conservative.
  - 2023: 248
  - 2024: 337
  - 2025: 302
  - 2026: 284
  - 2027: 274
- Usage per account will be constant based on historical data. Residential water usage per account is approximately 9,000 gallons per month, and sewer volume is about 4,000 gallons per month. Residential customers represent a majority of the utilities' customers.
- Costs will change as follows:
  - Capital costs will experience an annual increase of 4.5% due to inflation.
  - The expected inflation rates for operation and maintenance (O&M) expenses are:

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<sup>1</sup> The cash flow tables include 2023 as the base year, or the year in which the model was developed, and is based on a combination of budgetary information and estimated values. The study forecast is for 2024 through 2032.

- Personnel services (2024; 2025 – 2032): 6.0%; 4.0%
- Employee Related Expenditures (2024; 2025 – 2032): 6.0%; 4.0%
- Professional Services (2024 – 2032): 4.0%
- Staff Development (2024 – 2032): 3.0%
- Maintenance and Operations (2024 – 2032): 6.0%
- Depreciation (2024 – 2032): 3.0%
- Proposed minimum reserve levels are as follows:
  - Operating fund: 90 days annual O&M
  - Capital reserve: equal to 1-year depreciation expense.
- Debt service
  - Coverage requirement is 1.2 x debt service based on the revenue bond issuance requirements.
  - Bond terms: 4.50% interest rate, 20-year term, July 1 issue date, 1-year repayment delay
  - Interfund loan terms: 0.05% interest rate, 20-year term, Jan 1 issue date, 7-year repayment delay

## Findings and Conclusions

### WATER UTILITY

#### **Financial Plan**

Revenue from rates should be sufficient to cover operating expenses, repair and replacement capital, debt service, and supplement growth-related capital when necessary. Equal annual revenue adjustments of 30% in 2024 through 2026 and 5% in 2027 through 2032 are needed to meet these requirements.

#### **Cost of Service**

The cost of service analysis determines the cost of providing water service to each customer class and provides guidance for design of the proposed rates. Raftelis completed a comprehensive cost of service analysis for 2024 using standard methods supported by the American Water Works Association (AWWA) in its M1 manual, *Principles of Water Rates, Fees, and Charges*. Appendix A includes tables showing the development of water cost of service for 2024.

#### **Rate Design**

In the development of schedules of water rates, a basic consideration is to establish equitable charges to customers commensurate with the cost of providing service. Raftelis developed rates for 2024 under the existing structure for each customer class based on the customer class cost developed in the cost of service analysis. Raftelis increased the price ratios for the residential volumetric rate blocks 4 and 5 to further encourage the wise use of water, maintain a lower rate for block 1 for essential water use, all while maintaining revenue stability.



**Table 1: Comparison of 2023 Existing and 2024 Proposed Water Base Rates**

Water Tap Size (Inches)	Existing Base Rate \$ per Bill	Proposed Base Rate \$ per Bill
<b>Residential, \$ per Bill</b>	\$22.84	\$29.69
<b>Multifamily, \$ per Unit per Bill</b>	\$11.42	\$14.85
<b>Commercial</b>		
5/8 inch	\$22.84	\$29.69
3/4 inch	\$22.84	\$29.69
1 inch	\$38.83	\$50.48
1.5 inch	\$75.39	\$98.01
2 inch	\$121.07	\$157.39
3 inch	\$267.26	\$347.44
4 inch	\$479.71	\$623.62
6 inch	\$989.02	\$1,285.73

**Table 2: Comparison of 2023 Existing and 2024 Proposed Water Volume Rates**

Threshold (gallons)	Existing Rate, \$ per Kgal	Proposed Rate, \$ per Kgal
<b>Residential</b>		
0 - 5,000	\$3.18	\$3.69
5,000 - 10,000	\$3.66	\$4.24
10,000 - 15,000	\$4.21	\$5.09
15,000 - 20,000	\$4.84	\$6.37
20,000 - 25,000	\$5.57	\$7.96
> 25,000	\$6.40	\$9.95
<b>Multifamily</b>		
100,000	\$3.18	\$4.13
>100,000	\$4.84	\$6.29
<b>Commercial</b>	\$4.10	\$6.57

## SEWER UTILITY

### **Financial Plan**

Revenue from rates should be sufficient to cover operating expenses, repair and replacement capital, debt service, and supplement growth-related capital when necessary. It is recommended to make equal annual revenue adjustments of 15% to service revenue in the years 2024 through 2027.

### Rate Design

In the development of schedules of sewer rates, a basic consideration is to establish equitable charges to customers commensurate with the cost of providing service. Raftelis developed rates for 2024 under the existing structure. Table 3 compares the existing and proposed rates.

**Table 3: Comparison Between Existing Rates and Proposed 2024 Sewer Rates**

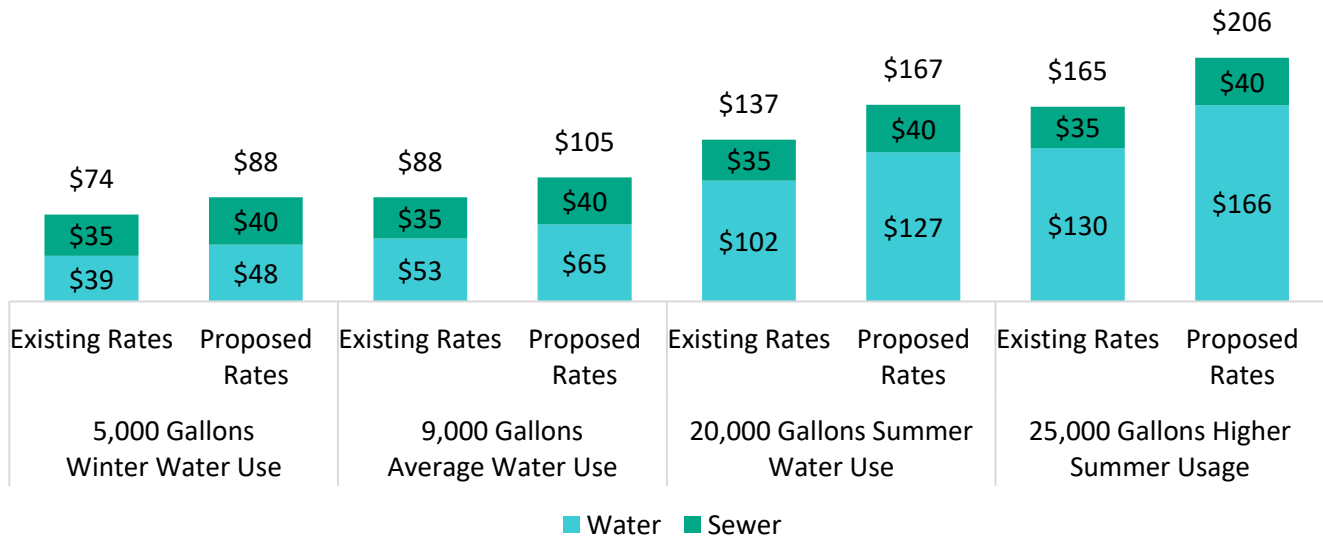
Customer Class	Existing Rate	Proposed Rate
<b>Commercial</b>		
Base Rate, \$ per Bill	\$34.79	\$40.01
Volume Rate, \$ per 1,000 gallons*	\$4.00	\$4.60
<b>Residential</b>		
Base Rate, \$ per Bill	\$34.79	\$40.01
<b>Multifamily</b>		
Base Rate, \$ per Unit per Bill	\$34.79	\$40.01

\*Based on winter water use (Dec - Feb)

### TYPICAL MONTHLY BILL COMPARISON

Figure 1 compares typical monthly bills under existing and 2024 proposed water and sewer rates at various levels of consumption.

**Figure 1: Typical Bill Comparison**



### WATER AND SEWER TAP FEES

Raftelis evaluated the Town’s water tap fees, water resource fees, and sewer tap fees. Our evaluation indicated that the water tap fees are at sufficient levels and adequately recover the cost to serve new development. The water resource and sewer tap fees require increases to ensure the adequate recovery of the cost of capacity for new development. Table 4 through 6 compares the existing and proposed tap fees for a ¾” meter. Tap fees for larger meter sizes are shown by tap size.

**Table 4: Existing and Proposed Water Tap Fee**

Tap Size (inches)	Existing		Proposed		\$ - Change
	Johnstown Equiv. Ratio	Current Tap Fee	Tap Fee	Tap Fee	
≤ 3/4"	1.0	\$6,909	\$6,909	\$6,909	\$0
1"	1.7	\$11,745	\$11,745	\$11,745	\$0
1-1/2"	3.3	\$22,798	\$22,798	\$22,798	\$0
2"	5.3	\$36,615	\$36,615	\$36,615	\$0
3"	11.7	\$80,830	\$80,830	\$80,830	\$0
4"	21.0	\$145,080	\$145,080	\$145,080	\$0
6"	43.3	\$299,141	\$299,141	\$299,141	\$0
8"	93.3	\$644,570	\$644,570	\$644,570	\$0
10"	140.0	\$967,200	\$967,200	\$967,200	\$0

**Table 5: Existing and Proposed Raw Water Resource Fee**

Tap Size (inches)	Existing		Proposed		\$ - Change
	Johnstown Equiv. Ratio	Current Fee	Proposed Fee	Proposed Fee	
≤ 3/4"	1.0	\$5,841	\$6,291	\$6,291	\$450
1"	1.7	\$9,929	\$10,693	\$10,693	\$764
1-1/2"	3.3	\$19,274	\$20,758	\$20,758	\$1,484
2"	5.3	\$30,955	\$33,338	\$33,338	\$2,383
3"	11.7	\$68,335	\$73,596	\$73,596	\$5,261
4"	21.0	\$122,653	\$132,095	\$132,095	\$9,442
6"	43.3	\$252,900	\$272,369	\$272,369	\$19,469
8"	93.3	\$544,932	\$586,882	\$586,882	\$41,950
10"	140.0	\$817,689	\$880,636	\$880,636	\$62,947

**Table 6: Existing and Proposed Sewer Tap Fee**

Line No.	Tap Fees (inches)	Existing	Current Tap Fee	Proposed Tap Fee	\$ - Change
		Johnstown Equiv. Ratio			
1	≤ 3/4"	1.0	\$5,667	\$9,313	\$3,646
2	1"	1.7	\$9,634	\$15,832	\$6,198
3	1 1/2"	3.3	\$18,701	\$30,733	\$12,032
4	2"	5.3	\$30,034	\$49,357	\$19,323
5	3"	11.7	\$66,302	\$108,959	\$42,657
6	4"	21.0	\$119,003	\$195,566	\$76,563
7	6"	43.3	\$245,373	\$403,240	\$157,867
8	8"	93.3	\$528,713	\$868,873	\$340,160
9	10"	140.0	\$793,353	\$1,303,776	\$510,423
10	Multi-Unit (Per Unit)	0.5	\$2,833	\$4,656	\$1,823

**RELIANCE ON TOWN PROVIDED DATA**

During this project, the Town (and/or its representatives) provided Raftelis with a variety of technical information, including cost and revenue data. Raftelis did not independently assess or test for the accuracy of such data – historic or projected. Raftelis has relied on this data in the formulation of our findings and subsequent recommendations, as well as in the preparation of this report. Raftelis also relied on cost allocation data provided by the Town needed to complete the cost-of-service analysis.

There are often differences between actual and projected data. Some of the assumptions used for projections in this report will not be realized, and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the data or results projected in this report and actual results achieved, and those differences may be material. As a result, Raftelis takes no responsibility for the accuracy of data or projections provided by or prepared on behalf of the Department, nor do we have any responsibility for updating this report for events occurring after the date of this report.

The results presented herein are drafted and under consideration by the Town. Drawing conclusions from information in this report is premature and may lead to erroneous assessments as the document may be subject to revisions and refinement.

# 2. Water Utility

## Financial Plan

### INTRODUCTION

The Town has one combined fund for the water utility. For the purposes of this study, Raftelis has created two sub-funds to track capital and operating-related activities separately.

- **Capital Expansion sub-fund.** Tracks activities associated with funding growth-related capital and regulatory projects. Sources include tap fees, loan proceeds, and transfers from the general fund, and operating fund to meet cash flow deficiencies. Uses of funds consist primarily of growth-related capital projects.
- **Operating sub-fund.** Tracks activities associated with daily operations of the utility. Sources include rate revenues, other operating revenues from miscellaneous fees, and other non-rate revenue. Uses include annual O&M expenses, payments on existing and proposed debt service from loans identified in the capital subfund.

Tables for the water utility financial plan, cost of service, and rate analysis can be found in Appendix A.

### CAPITAL EXPANSION FUND

#### **Beginning Balance**

The cash balance includes required reserves and unrestricted carryover monies from previous years. The fund balance is projected to be \$13.9 million at the beginning of 2024.

#### **Sources of Revenue**

Revenue from tap fees, carry-over reserves, projected loans, an interfund loan from the general fund, and as-needed transfers from the operating fund provide sufficient funding for the growth-related capital improvement program and payments on proposed debt service. Tap fee revenue averages \$4.0 million annually and totals \$40.0 million through study period. Tap fee revenue is based on the growth projection shown in *Assumptions* section. Loans of \$82.0 million in 2024 and \$80.0 million in 2031 are proposed to fund the water treatment plant expansion and raw water transmission line projects and another phase of the treatment plant project, respectively. The Town is anticipating a one-time interfund loan of \$40.0 million from the General Fund in 2024 to assist in funding the new water treatment plant.

#### **Uses of Revenue**

Growth-related capital and debt service payments are paid through the capital fund. The 10-year growth-related capital improvement program totals \$235.5 million. Major projects include the water treatment plant expansion, this includes expanding plant capacity from 5.9 MGD to 21.0 MGD, totals \$161.5 million over the study period, the raw water transmission line which totals \$49.2 million. General fund debt service payments begin in 2031 and average \$2.0 million annually. Debt service on the other state loans begins in 2024 at \$7.0 million and increases to \$13.1 million in 2031.

### OPERATING FUND

#### **Beginning Balance**

The cash balance includes required reserves and unrestricted carryover monies from previous years. The fund balance is projected to be \$2.2 million at the beginning of 2024.

## Revenues

Operating revenues primarily consist of rate revenue, with a small portion coming from miscellaneous sources. Revenue from existing rates is projected to increase from \$5.1 million in 2023 to \$8.9 million in 2032 based on the growth in customer accounts.

## Revenue Requirements

Expenditures include O&M which consist of costs to collect, treat, and distribute water to customers. O&M is projected to increase from \$5.0 million in 2023 to \$10.4 million in 2032, the largest expense being for chemicals, which is projected to increase from \$1.1 million in 2024 to \$2.0 million in 2032. Salaries and wages are projected to increase from \$907,248 in 2024 to \$2.0 million in 2032. Capital repair and replacement projects are necessary for maintaining the current level of service in the system and are not associated with meeting growth-related requirements. Capital R&R costs an average of \$3.9 million annually. Transfers to the capital expansion fund are needed to meet cashflow deficiencies in 2025 through 2032 which total \$39.5 million. It is anticipated that as future additional tap revenue will be used to ‘repay’ the operating fund for these transfers.

## Reserves

The Town does not have a formal reserve policy, but the reserve policy established in the study agreed upon by Town staff requires a minimum fund balance of \$2.0 million or the sum of ninety-days O&M and 1-year of depreciation expense, whichever is greater. This reserve tracks and adjusts based on changes in O&M and annual depreciation on capital assets. The primary goal of the operating reserve is to absorb cash flow fluctuations due to the variability in monthly expenditures and the inflow of revenues.

Combined, these reserves strengthen the utility’s financial health and ability to weather unexpected operating costs or capital interruptions. Maintaining adequate funds also prevents the utility from reactively having to adjust rates in response to unforeseen events.

## Indicated Revenue Adjustments

Projected water sales revenue under existing rates is insufficient to meet annual O&M, payments on existing debt service, capital repair and replacement costs, and proposed target operating reserves. Equal annual adjustments of 30% from service revenue are needed for 2024 to 2026, followed by adjustments of 5% for 2027 to 2032. Appendix A contains the detailed financial plan cash flow analysis tables. Table 7 below summarizes the operating fund results.

**Table 7: Water Operating Fund Cash Flow Summary**

Description	Budget		Projected							
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Beginning Fund Balance</b>	<b>\$2,360,000</b>	<b>\$2,200,233</b>	<b>\$1,256,265</b>	<b>\$3,363,476</b>	<b>\$4,159,518</b>	<b>\$5,191,968</b>	<b>\$8,618,966</b>	<b>\$10,740,898</b>	<b>\$14,104,039</b>	<b>\$13,303,434</b>
Sources of Funds	6,091,883	7,480,291	10,160,694	13,876,401	15,453,660	17,231,503	19,225,060	21,454,243	23,933,644	26,651,455
Uses of Funds	6,251,650	8,424,259	8,053,483	13,080,359	14,421,211	13,804,504	17,103,128	18,091,102	24,734,250	35,071,291
<i>Annual Surplus/(Deficiency)</i>	<i>(\$159,767)</i>	<i>(\$943,968)</i>	<i>\$2,107,211</i>	<i>\$796,042</i>	<i>\$1,032,450</i>	<i>\$3,426,999</i>	<i>\$2,121,931</i>	<i>\$3,363,141</i>	<i>(\$800,605)</i>	<i>(\$8,419,835)</i>
<b>Ending Fund Balance</b>	<b>2,200,233</b>	<b>1,256,265</b>	<b>3,363,476</b>	<b>4,159,518</b>	<b>5,191,968</b>	<b>8,618,966</b>	<b>10,740,898</b>	<b>14,104,039</b>	<b>13,303,434</b>	<b>4,883,598</b>
Target Reserve (Op + Capital)	2,360,000	2,270,000	2,510,000	3,050,000	3,170,000	3,290,000	3,420,000	3,550,000	3,700,000	3,860,000
<i>Over/(Under) Target</i>	<i>(\$159,767)</i>	<i>(\$1,013,735)</i>	<i>\$853,476</i>	<i>\$1,109,518</i>	<i>\$2,021,968</i>	<i>\$5,328,966</i>	<i>\$7,320,898</i>	<i>\$10,554,039</i>	<i>\$9,603,434</i>	<i>\$1,023,598</i>
Annual Revenue Adjustment	0.0%	30.0%	30.0%	30.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
DSC Including Tap Fee Revenue		1.67	1.25	1.41	1.59	1.80	2.02	2.28	1.69	1.54
DSC Excluding Tap Fee Revenue		0.56	0.65	0.84	1.02	1.22	1.45	1.70	1.10	1.06

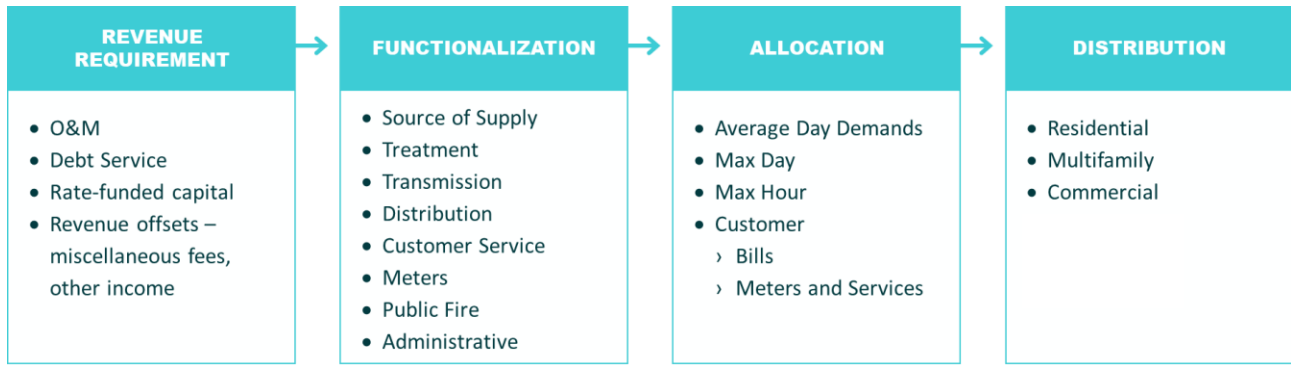
## Cost of Service

Raftelis completed this comprehensive cost of service analysis by standard methods supported by the American Water Works Association (AWWA) in its M1 manual, *Principles of Water Rates, Fees, and Charges*. This analysis determines the cost of providing water service to each customer class and guides the design of the proposed rates. The general steps of the cost-of-service analysis are:

1. **Revenue Requirement.** Determine the level of revenue required from rates. The revenue requirement includes expenditures in the operating fund: O&M, capital repair and replacement costs, reserves, and changes in fund balance.
2. **Cost functionalization.** Assign the detailed costs in the revenue requirements to functional areas in the system. Functional areas include water treatment, transmission and distribution, storage, source of supply, meters, and services, and billing and administrative costs. Costs are functionalized based on the facility that has the most influence on that expense. For example, chemical costs are most influenced by treatment processes so those costs would be allocated to the water treatment category.
3. **Demand parameters and customer characteristics.** Functional costs can be allocated to demand parameters and customer characteristics. Demand parameters include average day demands and peak demands. Customer characteristics include the number of accounts by meter size and bills. Each facility is designed to meet specific design requirements in the system. Water treatment facilities are designed and operated to meet maximum day demands. As a result, a portion of water treatment costs would be allocated to the average day demand category and a portion to the peak demand category.
4. **Units of service.** The units of service capture the demand and customer characteristics for each customer class. These characteristics include average day demand, peak demand, number of accounts by meter size, and the number of bills.
5. **Distribution of costs to customer classes.** Because customer classes are defined by their demand parameters (average day and peak demands) and the account makeup (meters by meter sizes), the allocated costs can be proportionately distributed to each class based on their specific demand and customer characteristics. For example, if the residential customer class represents 50% of total peak day demands, they would be allocated 50% of the allocated peak day demand costs.

The figure on the following page illustrates the cost allocation process for the water utility.

**Figure 2: Water Cost of Service Process**



The water cost of service tables are included in Appendix A. Table 8 compares the cost of service by customer class to revenue under existing rates.

**Table 8: Comparison of Test Year 2024 Water Cost of Service to Revenue Under Existing Rates**

Line No.	Customer	Cost of Service	Revenue Under Existing Rates	
			Existing Rates	Change - \$
1	Residential	\$5,183,825	\$4,103,209	\$1,080,616
2	Commercial	\$1,545,038	\$1,013,456	\$531,582
3	Multifamily	\$257,326	\$257,326	\$0
4	<b>Total System</b>	<b>\$6,986,189</b>	<b>\$5,373,991</b>	<b>\$1,612,197</b>

## Rate Design

The existing rate structure consists of two components – a monthly base charge which varies by meter size and applies to all customer classes and volume rate. The residential volume structure is a 6-tiered increasing block structure, the commercial structure is a uniform rate, and the multifamily volume structure is a 2-tiered increasing block structure. The proposed rates retained the existing rate structures for all classes. Out-of-Town rates maintain the 1.5 times rate differential.

The 2024 proposed rate is designed to recover the residential class cost of service. Modifications to tiers 4, 5, and 6 prices (the tiers with usage over 20,000 gallons) are designed to encourage the wise use of water. With the higher rates in tiers 4, 5, and 6, tier one is priced lower for essential water use (0 – 5,000 gallons). Retaining the base charge structure also assists in maintaining revenue stability.

Table 9 provides a summary of the proposed 2024 rates for each customer class.



**Table 9: Test Year 2024 Water Rates Under Each Customer Class to Existing Rates**

Residential Existing Rates		Residential Proposed Cost of Service Rates	
Description	Monthly Base Rate	Description	Monthly Base Rate
<b>Base Rate, \$ per Bill</b>		<b>Base Rate, \$ per Bill</b>	
5/8 inch	\$22.84	5/8 inch	\$29.69
<u>Threshold (kgal)</u>	<u>Rate, \$ per Kgal</u>	<u>Threshold (kgal)</u>	<u>Rate, \$ per Kgal</u>
5	\$3.18	5	\$3.69
10	\$3.66	10	\$4.24
15	\$4.21	15	\$5.09
20	\$4.84	20	\$6.37
25	\$5.57	25	\$7.96
>25	\$6.40	>25	\$9.95

Commercial Existing Rates		Commercial Proposed Cost of Service Rates	
Description	Monthly Base Rate	Description	Monthly Base Rate
<b>Commercial Base Rate, \$ per Bill</b>		<b>Commercial Base Rate, \$ per Bill</b>	
5/8 inch	\$22.84	5/8 inch	\$29.69
3/4 inch	\$22.84	3/4 inch	\$29.69
1 inch	\$38.83	1 inch	\$50.48
1.5 inch	\$75.39	1.5 inch	\$98.01
2 inch	\$121.07	2 inch	\$157.39
3 inch	\$267.26	3 inch	\$347.44
4 inch	\$479.71	4 inch	\$623.62
6 inch	\$989.02	6 inch	\$1,285.73
<b>Volume Rate, \$ per Kgal</b>	<b>\$4.10</b>	<b>Volume Rate, \$ per Kgal</b>	<b>\$6.57</b>

Multifamily Existing Rates		Multifamily Proposed Cost of Service Rates	
Description	Monthly Base Rate	Description	Monthly Base Rate
<b>Base Rate, \$ per unit per bill</b>		<b>Base Rate, \$ per unit per bill</b>	
	\$11.42		\$14.85
<u>Threshold (kgal)</u>	<u>Rate, \$ per Kgal</u>	<u>Threshold (kgal)</u>	<u>Rate, \$ per Kgal</u>
100	\$3.18	100	\$4.13
>100	\$4.84	>100	\$6.29

# 3. Sewer Utility

## Sewer Utility Financial Forecast

### CAPITAL EXPANSION FUND

Revenue from tap fees, regional sewer fees, reserves, projected loans, provides sufficient funding through the study period. The growth-related capital improvement program totals \$140.2 million. It is funded by a \$50.0 million transfer from the general fund in 2023, \$58.0 million in tap fee revenue, a projected revenue bond issuance of \$21.5 million in 2032, and the remainder from the carryover capital reserves and miscellaneous income. Debt service payments average \$3.7 million per year through the study period.

### OPERATING FUND

The operating fund tracks activities associated with operating and maintaining the sewer utility on a daily basis.

#### ***Beginning Balance***

The cash balance includes required reserves and unrestricted carryover monies from previous years. The fund balance is assumed to be \$2.0 million at the beginning of 2024.

#### ***Revenues***

Operating revenues comprise sewer service rate revenue, with a small portion coming from miscellaneous sources. Revenue from existing rates is projected to increase from \$3.1 million in 2022 to \$5.7 million in 2032 based on growth in the number of customer accounts.

#### ***Revenue Requirements***

Expenditures include O&M expenses which consist of costs to collect and treat sewer from customers. O&M is projected to increase from \$2.3 million in 2023 to \$6.6 million in 2032, with salaries and wages increasing from \$450,200 in 2023 to \$1.0 million in 2032. Capital repair and replacement projects are necessary for maintaining the current level of service in the system and are not associated with meeting growth-related requirements. Capital R&R costs an average of \$1.2 million annually. Transfers to the capital expansion fund must meet any intermittent cash flow deficiencies.

#### ***Reserves***

The Town did not have a formal reserve policy, but the reserve policy established in the study agreed upon by Town staff requires a minimum fund balance of \$2.0 million or the sum of ninety-days O&M and 1-year depreciation expense, whichever is greater. This reserve tracks and adjusts based on changes in O&M and annual depreciation on capital assets. The primary goal of the operating reserve is to absorb cash flow fluctuations due to the variability in monthly expenditures and the inflow of revenues.

Combined, these reserves strengthen the utility's financial health and ability to weather unexpected operating costs or capital interruptions. Maintaining adequate funds also prevents the utility from reactively having to adjust rates in response to unforeseen events.

## Indicated Revenue Adjustments

Projected sewer service revenue under existing rates is insufficient to meet O&M, debt service issuance expenses, and capital repair and replacement projects during the study period. Equal annual increases of 15% are proposed from 2024 through 2026 to meet these requirements. The study meets the annual DSC ratio by including tap fees as revenue. Table 10 summarizes the sewer operating fund financial plan cash flow results.

**Table 10: Sewer Operating Fund Cash Flow Summary**

Description	Budget		Projected							
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Beginning Fund Balance</b>	<b>\$2,000,000</b>	<b>\$2,997,839</b>	<b>\$3,543,712</b>	<b>\$4,062,184</b>	<b>\$4,792,807</b>	<b>\$4,430,134</b>	<b>\$5,098,255</b>	<b>\$5,092,130</b>	<b>\$5,860,726</b>	<b>\$6,146,446</b>
Sources of Funds	3,388,549	3,949,023	4,818,762	5,910,923	6,319,178	6,757,543	7,230,571	7,739,649	8,288,635	8,860,612
Uses of Funds	2,390,710	3,403,150	4,300,290	5,180,300	6,681,851	6,089,422	7,236,697	6,971,054	8,002,915	11,814,385
<i>Annual Surplus/(Deficiency)</i>	<i>\$997,839</i>	<i>\$545,873</i>	<i>\$518,472</i>	<i>\$730,623</i>	<i>(\$362,673)</i>	<i>\$668,122</i>	<i>(\$6,125)</i>	<i>\$768,596</i>	<i>\$285,720</i>	<i>(\$2,953,773)</i>
<b>Ending Fund Balance</b>	<b>2,997,839</b>	<b>3,543,712</b>	<b>4,062,184</b>	<b>4,792,807</b>	<b>4,430,134</b>	<b>5,098,255</b>	<b>5,092,130</b>	<b>5,860,726</b>	<b>6,146,446</b>	<b>3,192,673</b>
Target Reserve (Op + Capital)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
<i>Over/(Under) Target</i>	<i>\$997,839</i>	<i>\$1,543,712</i>	<i>\$2,062,184</i>	<i>\$2,792,807</i>	<i>\$2,430,134</i>	<i>\$3,098,255</i>	<i>\$3,092,130</i>	<i>\$3,860,726</i>	<i>\$4,146,446</i>	<i>\$1,192,673</i>
Annual Revenue Adjustment	0.0%	15.0%	15.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DSC Including Tap Fee Revenue	3.46	3.26	2.57	2.88	2.59	2.57	2.60	1.36	1.38	1.16
DSC Excluding Tap Fee Revenue	0.98	0.47	0.34	0.64	0.70	0.68	0.70	0.38	0.41	0.35

## Rate Design

The existing residential sewer rate is a monthly flat charge, and the commercial rate structure includes a monthly base charge plus a volumetric rate based on average winter water use for the months December through February. The proposed rates retained the existing structure. Out-of-Town rates are 1.5x In-Town rates. Table 11 compares the existing and proposed rates.

**Table 11: Comparison of Test Year 2024 Sewer Rates to Existing Rates**

Customer Class	Existing Rate	Proposed Rate
<b>Commercial</b>		
Base Rate, \$ per Bill	\$34.79	\$40.01
Volume Rate, \$ per 1,000 gallons*	\$4.00	\$4.60
<b>Residential</b>		
Base Rate, \$ per Bill	\$34.79	\$40.01
<b>Multifamily</b>		
Base Rate, \$ per Unit per Bill	\$34.79	\$40.01

\*Based on winter water use (Dec - Feb)

# 4. Tap Fees

The Town charges water and sewer tap fees to all new connectors. The tap fee is intended to recover a new connector's proportionate share of the Town's water and sewer backbone facility costs. Tap fees must comply with the State Statutes, which are summarized below. The Colorado Revised Statutes (CRS) §29-20-104.5 for Impact Fees (tap fees) outline the requirements for calculating and implementing an impact fee (tap fee). The basic tenets of the Statute are listed below.

- Fees must generally apply to a broad property class (for example, residential, commercial, etc.).
- Fees must be intended to defray the projected impacts on capital facilities caused by the proposed development.
- Fees are directly related to services that a local government can provide.
- The asset has an estimated useful life of five years or longer.
- The fee is required by a local government's charter or general policy pursuant to a resolution or ordinance.

## OVERVIEW OF THE TAP FEE CALCULATION PROCESS

The general steps and equation used in calculating tap fees are as follows:

- Determine the value of backbone facilities (existing or future growth-related)
- Estimate current system capacity or level-of-service
- Calculate unit cost of capacity
- Determine customer service level demand characteristics in terms of peak demand (gallons per day)
- Apply unit cost of capacity to customer's demand characteristics

$$\frac{\text{Value of Backbone Facilities}}{\text{System Capacity (gpd)}} \times \text{New Customer Demand (gpd)} = \text{Tap Fee}$$

The table below summarizes the generally accepted methodologies for calculating tap fees. Each method is designed to recover the cost of capacity to serve new development. The selection of a methodology should consider a utility's goals and objectives for recovering capacity-related capital costs. The three methodologies include buy-in, incremental, and hybrid. Table 12 below lists the basic parameters a utility may consider when selecting a method that best meets its needs.

**Table 12: Industry Standard Tap Fees Methodologies**

Description	Buy-in	Incremental	Hybrid	Capacity Basis (gpm) [1]	Valuation Basis (\$)
Available existing capacity sufficient to accommodate new growth	X			Existing Available Capacity	Existing Asset Value [2]
No existing capacity with significant future capacity requirements		X		Future Capacity	Current Cost of Future Facilities
Some existing capacity available with future capacity requirements needed to accommodate new growth		X	X	Available Capacity + Future Capacity	Existing Asset Value + Current Cost of Future Facilities

[1] The basis of capacity used to calculate the unit cost is often based on the largest facilities that govern system capacity.  
 [2] Assets may be valued at original cost of in current dollars using a cost index like the Consumer Price Index (CPI) or a construction cost index like Engineering News Record (ENR-CCI).

## WATER TAP FEES

The water tap fees were calculated using the hybrid methodology. This methodology recognizes that utility has some remaining capacity in existing facilities to serve growth but will require additional expansion facilities soon to accommodate new customers based on the timing and amount of future development. Water backbone facilities include major infrastructure such as treatment plants, transmission mains, and treated water storage that benefit all customers. Raftelis' review of the existing tap fee and proposed expansion costs showed the current tap fee is at a sufficient level to recover the cost to serve a new development. **Error! Reference source not found.** Table 13 shows the current water tap fees.

**Table 13: Comparison of Existing and Calculated Water Tap Fees**

Tap Size (inches)	Existing		Proposed Tap Fee	\$ - Change
	Johnstown Equiv. Ratio	Current Tap Fee		
≤ 3/4"	1.0	\$6,909	\$6,909	\$0
1"	1.7	\$11,745	\$11,745	\$0
1-1/2"	3.3	\$22,798	\$22,798	\$0
2"	5.3	\$36,615	\$36,615	\$0
3"	11.7	\$80,830	\$80,830	\$0
4"	21.0	\$145,080	\$145,080	\$0
6"	43.3	\$299,141	\$299,141	\$0
8"	93.3	\$644,570	\$644,570	\$0
10"	140.0	\$967,200	\$967,200	\$0

## RAW WATER DEVELOPMENT FEES

The raw water development fee is a fee that is imposed on all new water tap installations. This fee is designated for financing raw water development initiatives within the Town and is calculated based on the size of the water meter. The fee is based on water resource-related capital projects, the replacement cost new less depreciation (RCNLD) of raw water-related assets. Table 14 shows the development of the water resource fee and Table 15 compares existing and proposed resource fees.

**Table 14: Development of Raw Water Resource Fee**

Description	Total Cost
<b>Infrastructure</b>	
Raw Water - 24" CIPP Town Lake Lining	30,000
Raw Water - Transmission Line	45,500,000
Raw Water - Flushing Line to Town Lake	1,000,000
<b>Total Water Resource-Related Capital Projects</b>	<b>\$46,530,000</b>
<b>Existing Infrastructure Assets @ RCLND [1]</b>	<b>\$2,233,388</b>
<b>Total Raw Water-Related Capital Costs</b>	<b>\$48,763,388</b>
Annual Acre Feet Available [2]	4,496
\$ per Acre Foot	\$10,846
Acre Feet per 3/4" Equivalent Per Year	0.58
<b>Raw Water Development Fee, 5/8" Equivalent</b>	<b>\$6,291</b>
Current Raw Water Development Fee	\$5,841
<i>\$ - Change</i>	<i>\$450</i>

[1] RCLND: Replacement Cost New Less Accumulated Depreciation. Includes infrastructure assets only

[2] Source: <https://johnstown.colorado.gov/johnstownwaterstory>

**Table 15: Comparison of Existing and Calculated Raw Water Development Fees**

Tap Size (inches)	Existing		Proposed Fee	\$ - Change
	Johnstown Equiv. Ratio	Current Fee		
≤ 3/4"	1.0	\$5,841	\$6,291	\$450
1"	1.7	\$9,929	\$10,693	\$764
1-1/2"	3.3	\$19,274	\$20,758	\$1,484
2"	5.3	\$30,955	\$33,338	\$2,383
3"	11.7	\$68,335	\$73,596	\$5,261
4"	21.0	\$122,653	\$132,095	\$9,442
6"	43.3	\$252,900	\$272,369	\$19,469
8"	93.3	\$544,932	\$586,882	\$41,950
10"	140.0	\$817,689	\$880,636	\$62,947

## SEWER TAP FEES

The sewer tap fees were calculated using the hybrid methodology. This methodology recognizes that utility has remaining capacity in existing facilities to serve growth but will require additional expansion facilities soon to accommodate new customers, based on the timing and amount of future development.

Table 17 shows the current and calculated sewer tap fee schedules. The current tap fees are determined using equivalency ratios linked to the size of water meters. The Town applies an equivalency ratio of 0.5 single-family unit to each dwelling unit when assessing multifamily connections.

**Table 16: Development of Sewer Tap Fee**

Description	Value
WWTP Expansion	\$108,762,608
Debt Carrying Costs	\$22,874,503
Total Growth-Related Costs	\$131,637,112
Phase I WWTP Capacity, gpd	3,110,000
SFE Peak Demand, gpd	220
<b>Proposed 3/4" Tap Fee</b>	<b>\$9,313</b>
Current Tap Fees	\$5,667
\$ - Change	\$3,646

[1] Phase II Expansion will not occur until after the study period, assumed Phase I peak day capacity for new capacity.

[2] Page 22 of Utility Plan Update 2022: 2.78 capita per SFE, 79 gpdc

**Table 17: Comparison of Existing and Calculated Sewer Tap Fees**

Tap Fees (inches)	Existing Johnstown Equiv. Ratio	Current Tap Fee	Proposed Tap Fee	\$ - Change
≤ 3/4"	1.0	\$5,667	\$9,313	\$3,646
1"	1.7	\$9,634	\$15,832	\$6,198
1 1/2"	3.3	\$18,701	\$30,733	\$12,032
2"	5.3	\$30,034	\$49,357	\$19,323
3"	11.7	\$66,302	\$108,959	\$42,657
4"	21.0	\$119,003	\$195,566	\$76,563
6"	43.3	\$245,373	\$403,240	\$157,867
8"	93.3	\$528,713	\$868,873	\$340,160
10"	140.0	\$793,353	\$1,303,776	\$510,423
Multi-Unit (Per Unit)	0.5	\$2,833	\$4,656	\$1,823





APPENDIX A:

**Water Utility  
Financial Plan, Cost of Service,  
and Rate Design Analysis**

Town of Johnstown  
Water Utility  
Combined Water Enterprise Fund

Table A-1

Line No.	Description	Budget	Projected								
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Sources of Funds</b>											
1	Revenue from Existing Water Service Rates	5,064,834	5,373,991	5,716,435	6,081,915	6,472,065	6,888,647	7,333,553	7,808,821	8,316,643	8,859,381
2	Additional Water Sales Revenue Required	0	1,612,197	3,944,340	7,280,052	8,458,018	9,796,982	11,317,888	13,044,379	15,003,145	17,224,320
3	<b>Total Water Service Rate Revenue</b>	<b>5,064,834</b>	<b>6,986,189</b>	<b>9,660,776</b>	<b>13,361,966</b>	<b>14,930,084</b>	<b>16,685,629</b>	<b>18,651,441</b>	<b>20,853,199</b>	<b>23,319,787</b>	<b>26,083,701</b>
4	Miscellaneous Revenue	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000
5	Municipal Water Sales (Raw and Potable)	45,914	45,685	45,685	45,685	45,685	45,685	45,685	45,685	45,685	45,685
6	Raw Water Irrigation Sales	56,135	56,135	56,135	56,135	56,135	56,135	56,135	56,135	56,135	56,135
7	Transfer from General Fund	0	40,000,000	0	0	0	0	0	0	0	0
8	Tap Fees	3,274,244	4,494,721	4,155,866	4,036,826	4,014,731	4,015,000	4,015,000	4,015,000	4,015,000	4,015,000
9	Future State Loans	0	0	0	0	0	0	0	0	0	0
10	Investment Income	631,778	17,282	431,869	37,615	92,290	162,679	155,304	155,027	137,037	143,261
11	Revenue Bond Issuance Proceeds	0	82,000,000	0	0	0	0	0	0	80,000,000	0
12	Water Share Fee	1,647,250	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
13	One Time Cash in Lieu	0	0	0	0	12,000,000	0	0	0	0	0
13	<b>Total Sources</b>	<b>11,095,155</b>	<b>133,977,412</b>	<b>14,727,731</b>	<b>17,915,627</b>	<b>31,516,323</b>	<b>21,342,528</b>	<b>23,300,965</b>	<b>25,502,446</b>	<b>107,951,044</b>	<b>30,721,181</b>
<b>Uses of Funds</b>											
14	Operation and Maintenance Expense	4,950,650	5,095,934	5,926,035	7,947,161	8,305,791	8,683,256	9,080,577	9,498,835	9,939,170	10,402,785
<b>Debt Service</b>											
15	Existing - Bonds/Loans	0	0	0	0	0	0	0	0	0	0
16	Proposed - Bonds/Loans	0	4,070,300	6,977,600	6,977,600	6,977,600	6,977,600	6,977,600	6,977,600	10,565,100	13,127,700
17	Intrafund Loan Payment	0	0	0	0	0	0	0	0	2,090,900	2,090,900
17	<b>Total Debt Service</b>	<b>0</b>	<b>4,070,300</b>	<b>6,977,600</b>	<b>6,977,600</b>	<b>6,977,600</b>	<b>6,977,600</b>	<b>6,977,600</b>	<b>6,977,600</b>	<b>12,656,000</b>	<b>15,218,600</b>
18	Transfer Out	600,000	0	0	0	0	0	0	0	0	0
19	<b>Total Capital</b>	<b>15,523,280</b>	<b>47,740,825</b>	<b>80,572,881</b>	<b>3,433,198</b>	<b>4,415,419</b>	<b>4,121,248</b>	<b>7,278,202</b>	<b>8,045,992</b>	<b>63,174,539</b>	<b>40,295,687</b>
20	<b>Total Uses</b>	<b>21,073,930</b>	<b>56,907,059</b>	<b>93,476,515</b>	<b>18,357,959</b>	<b>19,698,811</b>	<b>19,782,104</b>	<b>23,336,379</b>	<b>24,522,427</b>	<b>85,769,709</b>	<b>65,917,072</b>
21	Annual Surplus (Deficiency)	(9,978,775)	77,070,353	(78,748,784)	(442,332)	11,817,513	1,560,424	(35,414)	980,019	22,181,336	(35,195,891)
22	Beginning Balance	16,270,940	6,292,165	83,362,518	4,613,734	4,171,402	15,988,915	17,549,338	17,513,924	18,493,943	40,675,279
23	Ending Balance	6,292,165	83,362,518	4,613,734	4,171,402	15,988,915	17,549,338	17,513,924	18,493,943	40,675,279	5,479,388
<b>Proposed Target Reserves</b>											
24	Operations and Maintenance (90 Days O&M)	1,390,000	1,270,000	1,480,000	1,990,000	2,080,000	2,170,000	2,270,000	2,370,000	2,480,000	2,600,000
25	Capital Reserve (1-year Depreciation Expense)	970,000	1,000,000	1,030,000	1,060,000	1,090,000	1,120,000	1,150,000	1,180,000	1,220,000	1,260,000
26	<b>Total Proposed Target Reserves</b>	<b>2,360,000</b>	<b>2,270,000</b>	<b>2,510,000</b>	<b>3,050,000</b>	<b>3,170,000</b>	<b>3,290,000</b>	<b>3,420,000</b>	<b>3,550,000</b>	<b>3,700,000</b>	<b>3,860,000</b>
27	Over/(Under) Proposed Reserve Target	3,932,165	81,092,518	2,103,734	1,121,402	12,818,915	14,259,338	14,093,924	14,943,943	36,975,279	1,619,388
28	Annualized Water Service Revenue Increase	0.0%	30.0%	30.0%	30.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
<b>Debt Service Coverage</b>											
29	Including Tap Fee Revenue		1.67	1.25	1.41	1.59	1.80	2.02	2.28	1.69	1.54
30	Excluding Tap Fee Revenue		0.56	0.65	0.84	1.02	1.22	1.45	1.70	1.10	1.06

Town of Johnstown  
 Water Utility  
 Capital Expansion Fund Cash Flow Analysis

Table A-2

Line No.	Description	Budget	Projected								
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Sources of Funds											
1	Tap Fees	3,274,244	4,494,721	4,155,866	4,036,826	4,014,731	4,015,000	4,015,000	4,015,000	4,015,000	4,015,000
2	Transfer from General Fund	0	40,000,000	0	0	0	0	0	0	0	0
3	Investment Income	81,778	0	408,771	0	45,532	93,625	58,505	30,803	0	52,326
4	Transfer from Operating Fund	0	0	1,600,000	1,700,000	1,700,000	1,000,000	4,000,000	5,000,000	7,000,000	17,500,000
5	Revenue Bond Issuance Proceeds	0	82,000,000	0	0	0	0	0	0	80,000,000	0
6	State Loan Proceeds	0	0	0	0	0	0	0	0	0	0
7	Water Share Fee	1,647,250	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
8	One Time Cash in Lieu	0	0	0	0	12,000,000	0	0	0	0	0
9	Total Sources	5,003,272	126,497,121	6,167,037	5,739,226	17,762,663	5,111,025	8,075,905	9,048,203	91,017,400	21,569,726
Uses of Funds											
10	Capital Projects - Expansion	14,822,280	44,412,500	80,045,433	0	0	0	3,255,650	4,453,725	55,379,459	33,127,181
11	Transfer to Operating Fund	0	0	0	0	0	0	0	0	0	0
Debt Service											
12	Existing	0	0	0	0	0	0	0	0	0	0
13	Proposed	0	4,070,300	6,977,600	6,977,600	6,977,600	6,977,600	6,977,600	6,977,600	10,565,100	13,127,700
14	Intrafund Loan Payment	0	0	0	0	0	0	0	0	2,090,900	2,090,900
15	Total Debt Service	0	4,070,300	6,977,600	6,977,600	6,977,600	6,977,600	6,977,600	6,977,600	12,656,000	15,218,600
15	Total Uses	14,822,280	48,482,800	87,023,033	6,977,600	6,977,600	6,977,600	10,233,250	11,431,325	68,035,459	48,345,781
16	Annual Surplus (Deficiency)	(9,819,008)	78,014,321	(80,855,996)	(1,238,374)	10,785,063	(1,866,575)	(2,157,345)	(2,383,123)	22,981,941	(26,776,055)
17	Beginning Balance	13,910,940	4,091,932	82,106,254	1,250,258	11,884	10,796,947	8,930,372	6,773,027	4,389,904	27,371,845
18	Ending Balance	4,091,932	82,106,254	1,250,258	11,884	10,796,947	8,930,372	6,773,027	4,389,904	27,371,845	595,790

Town of Johnstown  
 Water Utility  
 Operating Fund Cash Flow Analysis

Table A-3

Line No.	Description	Budget	Projected								
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Sources of Funds</b>											
1	Revenue from Existing Water Service Rates	5,064,834	5,373,991	5,716,435	6,081,915	6,472,065	6,888,647	7,333,553	7,808,821	8,316,643	8,859,381
2	Additional Water Sales Revenue Required	0	1,612,197	3,944,340	7,280,052	8,458,018	9,796,982	11,317,888	13,044,379	15,003,145	17,224,320
3	<b>Total Water Service Rate Revenue</b>	<b>5,064,834</b>	<b>6,986,189</b>	<b>9,660,776</b>	<b>13,361,966</b>	<b>14,930,084</b>	<b>16,685,629</b>	<b>18,651,441</b>	<b>20,853,199</b>	<b>23,319,787</b>	<b>26,083,701</b>
4	Miscellaneous Revenue	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000
5	Municipal Water Sales (Raw and Potable)	45,914	45,685	45,685	45,685	45,685	45,685	45,685	45,685	45,685	45,685
6	Raw Water Irrigation Sales	56,135	56,135	56,135	56,135	56,135	56,135	56,135	56,135	56,135	56,135
7	Transfer From Capital Fund	0	0	0	0	0	0	0	0	0	0
8	Investment Income	550,000	17,282	23,099	37,615	46,757	69,055	96,799	124,225	137,037	90,935
9	<b>Total Sources</b>	<b>6,091,883</b>	<b>7,480,291</b>	<b>10,160,694</b>	<b>13,876,401</b>	<b>15,453,660</b>	<b>17,231,503</b>	<b>19,225,060</b>	<b>21,454,243</b>	<b>23,933,644</b>	<b>26,651,455</b>
<b>Uses of Funds</b>											
10	Operation and Maintenance Expense	4,950,650	5,095,934	5,926,035	7,947,161	8,305,791	8,683,256	9,080,577	9,498,835	9,939,170	10,402,785
11	Existing Debt Service	0	0	0	0	0	0	0	0	0	0
12	Transfer Out	600,000	0	0	0	0	0	0	0	0	0
13	Repair and Replacement Projects	701,000	3,328,325	527,448	3,433,198	4,415,419	4,121,248	4,022,551	3,592,267	7,795,080	7,168,506
14	Transfer To Capital Expansion Fund	0	0	1,600,000	1,700,000	1,700,000	1,000,000	4,000,000	5,000,000	7,000,000	17,500,000
15	<b>Total Uses of Funds</b>	<b>6,251,650</b>	<b>8,424,259</b>	<b>8,053,483</b>	<b>13,080,359</b>	<b>14,421,211</b>	<b>13,804,504</b>	<b>17,103,128</b>	<b>18,091,102</b>	<b>24,734,250</b>	<b>35,071,291</b>
16	Annual Surplus (Deficiency)	(159,767)	(943,968)	2,107,211	796,042	1,032,450	3,426,999	2,121,931	3,363,141	(800,605)	(8,419,835)
17	Beginning Balance	2,360,000	2,200,233	1,256,265	3,363,476	4,159,518	5,191,968	8,618,966	10,740,898	14,104,039	13,303,434
18	Ending Balance	2,200,233	1,256,265	3,363,476	4,159,518	5,191,968	8,618,966	10,740,898	14,104,039	13,303,434	4,883,598
<hr/>											
<i>Proposed Target Reserves</i>											
19	<i>Operations and Maintenance (90 Days O&amp;M)</i>	<i>1,390,000</i>	<i>1,270,000</i>	<i>1,480,000</i>	<i>1,990,000</i>	<i>2,080,000</i>	<i>2,170,000</i>	<i>2,270,000</i>	<i>2,370,000</i>	<i>2,480,000</i>	<i>2,600,000</i>
20	<i>Capital Reserve (1-year Depreciation Expense)</i>	<i>970,000</i>	<i>1,000,000</i>	<i>1,030,000</i>	<i>1,060,000</i>	<i>1,090,000</i>	<i>1,120,000</i>	<i>1,150,000</i>	<i>1,180,000</i>	<i>1,220,000</i>	<i>1,260,000</i>
21	<b>Total Proposed Target Reserves</b>	<b>2,360,000</b>	<b>2,270,000</b>	<b>2,510,000</b>	<b>3,050,000</b>	<b>3,170,000</b>	<b>3,290,000</b>	<b>3,420,000</b>	<b>3,550,000</b>	<b>3,700,000</b>	<b>3,860,000</b>
22	Over/(Under) Proposed Reserve Target	(159,767)	(1,013,735)	853,476	1,109,518	2,021,968	5,328,966	7,320,898	10,554,039	9,603,434	1,023,598
23	Annual Water Service Revenue Increase	0.0%	30.0%	30.0%	30.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Town of Johnstown  
 Water Utility  
 Budget & Projected Operation and Maintenance Expense

Table A-4

Line No.	Account Description	Inflation Coding	Budget		Projected							
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	BILLING AND ADMINISTRATIVE	MO	20,000	20,000	21,200	22,472	23,820	25,250	26,765	28,370	30,073	31,877
2	CHEMICALS	MO	1,500,000	1,099,800	1,165,788	1,387,235	1,470,469	1,558,698	1,652,219	1,751,353	1,856,434	1,967,820
3	COMPENSATED ABSENCES	E	6,000	6,360	6,614	6,879	7,154	7,440	7,738	8,047	8,369	8,704
4	COMPUTERS AND SOFTWARE	MO	38,600	115,800	122,748	130,113	137,920	146,195	154,967	164,265	174,120	184,568
5	FUEL AND LUBRICANTS	MO	14,000	18,060	19,144	20,292	21,510	22,800	24,168	25,618	27,156	28,785
6	GROUP INSURANCE	E	149,000	157,940	164,258	170,828	177,661	184,767	192,158	199,844	207,838	216,152
7	HYDRANTS	MO	50,000	50,000	53,000	56,180	59,551	63,124	66,911	70,926	75,182	79,692
8	INSURANCE	O	57,300	67,798	67,798	67,798	67,798	67,798	67,798	67,798	67,798	67,798
9	MAINTENANCE - BUILDINGS	MO	5,000	5,300	5,618	5,955	6,312	6,691	7,093	7,518	7,969	8,447
10	MAINTENANCE - EQUIPMENT	MO	190,000	191,760	203,266	383,562	406,575	430,970	456,828	484,238	513,292	544,089
11	MAINTENANCE - INFRASTRUCTURE	MO	125,000	149,850	158,841	168,371	178,474	189,182	200,533	212,565	225,319	238,838
12	MAINTENANCE - VEHICLES	MO	7,000	13,420	14,225	15,079	15,983	16,942	17,959	19,037	20,179	21,389
13	MEMBERSHIPS & SUBSCRIPTIONS	O	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700
14	MISCELLANEOUS	O	200,500	202,000	202,000	202,000	202,000	202,000	202,000	202,000	202,000	202,000
15	OTHER CONTRACTUAL SERVICES	PS	298,900	238,070	247,593	453,321	471,454	490,312	509,925	530,322	551,535	573,596
16	OVERTIME	E	34,250	36,305	37,757	39,267	40,838	42,472	44,171	45,937	47,775	49,686
17	PAYROLL TAXES	E	57,500	60,950	63,388	65,924	68,560	71,303	74,155	77,121	80,206	83,414
18	POSTAGE	MO	4,250	6,000	6,360	6,742	7,146	7,575	8,029	8,511	9,022	9,563
19	PRINTING AND ADVERTISING	MO	17,600	18,656	19,775	20,962	22,220	23,553	24,966	26,464	28,052	29,735
20	PROFESSIONAL SERVICES	MO	202,000	203,520	215,731	228,675	242,396	256,939	272,356	288,697	306,019	324,380
21	RETIREMENT CONTRIBUTION	E	87,800	93,068	96,791	100,662	104,689	108,876	113,231	117,761	122,471	127,370
22	SALARIES	E	737,600	907,248	943,538	1,603,779	1,667,931	1,734,648	1,804,034	1,876,195	1,951,243	2,029,293
23	SUPPLIES - FLEET	MO	2,000	7,400	7,844	8,315	8,814	9,342	9,903	10,497	11,127	11,794
24	SUPPLIES - GENERAL	MO	14,000	8,000	8,480	8,989	9,528	10,100	10,706	11,348	12,029	12,751
25	SUPPLIES - JANITORIAL	MO	1,000	1,060	1,124	1,191	1,262	1,338	1,419	1,504	1,594	1,689
26	SUPPLIES - LAB	MO	30,000	31,800	33,708	35,730	37,874	40,147	42,556	45,109	47,815	50,684
27	SUPPLIES - OPERATIONAL	MO	60,000	49,950	52,947	56,124	59,491	63,061	66,844	70,855	75,106	79,613
28	SUPPLIES - SAFETY	MO	8,000	8,480	8,989	9,528	10,100	10,706	11,348	12,029	12,751	13,516
29	SUPPLIES - TRAINING	MO	5,000	5,300	5,618	5,955	6,312	6,691	7,093	7,518	7,969	8,447
30	SUPPLIES - VEHICLES	MO	2,000	8,000	8,480	8,989	9,528	10,100	10,706	11,348	12,029	12,751
31	TELEPHONE & INTERNET	MO	20,500	12,720	13,483	14,292	15,150	16,059	17,022	18,044	19,126	20,274
32	TRANSFER OUT	O	600,000	0	0	0	0	0	0	0	0	0
33	TRAVEL & TRAINING	SD	9,500	9,785	10,079	10,381	10,692	11,013	11,343	11,684	12,034	12,395
34	UNEMPLOYMENT TAXES	E	11,500	12,190	12,678	13,185	13,712	14,261	14,831	15,424	16,041	16,683
35	UNIFORMS	E	5,500	6,795	7,067	7,349	7,643	7,949	8,267	8,598	8,942	9,299
36	UTILITIES	MO	230,000	253,000	268,180	787,771	835,037	885,139	938,248	994,542	1,054,215	1,117,468
37	WATER ASSESSMENTS	O	225,000	226,000	226,000	226,000	226,000	226,000	226,000	226,000	226,000	226,000
38	WATER METERS	MO	150,000	321,000	340,260	360,676	382,316	405,255	429,570	455,345	482,665	511,625
39	WATER SHARES	O	350,000	351,900	351,900	351,900	351,900	351,900	351,900	351,900	351,900	351,900
40	WORKERS COMPENSATION	E	21,650	22,949	23,867	24,822	25,815	26,847	27,921	29,038	30,199	31,407
41	C&D Lead Water (2024)	E	0	95,000	98,800	102,752	106,862	111,137	115,582	120,205	125,014	130,014
42	C&D Operator Water (2025)	E	0	0	117,000	121,680	126,547	131,609	136,873	142,348	148,042	153,964

Line No.	Account Description	Inflation Coding	Budget	Projected								
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	BILLING AND ADMINISTRATIVE	MO	20,000	20,000	21,200	22,472	23,820	25,250	26,765	28,370	30,073	31,877
2	CHEMICALS	MO	1,500,000	1,099,800	1,165,788	1,387,235	1,470,469	1,558,698	1,652,219	1,751,353	1,856,434	1,967,820
3	COMPENSATED ABSENCES	E	6,000	6,360	6,614	6,879	7,154	7,440	7,738	8,047	8,369	8,704
4	COMPUTERS AND SOFTWARE	MO	38,600	115,800	122,748	130,113	137,920	146,195	154,967	164,265	174,120	184,568
43	Water Resources Engineer/Manager (2025)	E	0	0	292,500	304,200	316,368	329,023	342,184	355,871	370,106	384,910
44	Regulatory Compliance/Pre-Treatment Cord. (2025)	E	0	0	198,900	206,856	215,130	223,735	232,685	241,992	251,672	261,739
45	C&D Operator Water (2026)	E	0	0	0	121,680	126,547	131,609	136,873	142,348	148,042	153,964
46			5,550,650	5,095,934	5,926,035	7,947,161	8,305,791	8,683,256	9,080,577	9,498,835	9,939,170	10,402,785

Town of Johnstown  
 Water Utility  
 Water Capital Improvement Plan (Excluding Inflation)

Table A-5

Line No.	Title	Growth Related	Raw or Treated	Bond Eligible	Category	Projected										10-Year Total	
						2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
						\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	WTP Pilot project	100%	Treated	100%	Planning	261,280	0	0	0	0	0	0	0	0	0	0	261,280
2	WTP - Treatment Plant	100%	Treated	100%	New Infrastructure	12,000,000	30,000,000	38,000,000	0	0	0	0	2,272,724	28,442,012	22,291,427	0	133,006,163
3	WTP - 34 Tank Chlorine Injection	50%	Treated	50%	Enhancement	350,000	0	0	0	0	0	0	0	0	0	0	350,000
4	WTP - Generator Town Lake	100%	Treated	100%	Equipment	300,000	0	0	0	0	0	0	0	0	0	0	300,000
5	WTP - Storage Tanks Rehab	0%	Treated	0%	Maintenance	0	0	0	0	0	0	0	0	0	0	500,000	500,000
6	WTP - TOC Analyzer	100%	Treated	100%	Equipment (Lab)	46,000	0	0	0	0	0	0	0	0	0	0	46,000
7	WTP - Central Weld Participation	100%	Treated	100%	Planning	0	0	0	0	0	0	2,500,000	0	10,500,000	0	13,000,000	
8	Raw Water - 24" CIPP Town Lake Lining	50%	Raw	50%	Enhancement	30,000	0	0	0	0	0	0	0	0	0	0	30,000
9	Raw Water - Transmission Line	100%	Raw	100%	New Infrastructure	500,000	10,000,000	35,000,000	0	0	0	0	0	0	0	0	45,500,000
10	WTP - Emergency GSTank Repair	0%	Treated	0%	Maintenance	360,000	0	0	0	0	0	0	0	0	0	0	360,000
11	Raw Water - Flushing Line to Town Lake	0%	Raw	0%	New Infrastructure	0	0	0	0	0	0	0	0	0	1,000,000	1,000,000	
12	Equip - WTP Crew Vehicles (150/Ranger)	0%	Treated	0%	Equipment	26,000	0	45,000	0	45,000	0	45,000	0	45,000	0	0	206,000
13	Equip - WTP Fork Lift	0%	Treated	0%	Equipment	0	0	0	45,000	0	0	0	0	0	0	0	45,000
14	Equip - WTP Grounds Mowers	0%	Treated	0%	Equipment	0	0	12,000	0	0	0	0	0	12,000	0	0	24,000
15	South Tank Construction Carry over	100%	Treated	100%	New Infrastructure	1,400,000	0	0	0	0	0	0	0	0	0	0	1,400,000
16	Water Dist - SH60 CWWTP Water Line-	50%	Treated	50%	Enhancement	250,000	5,000,000	0	0	0	0	0	0	0	0	0	5,250,000
17	Water Dist - Water Meter Replacement	0%	Treated	0%	Maintenance	0	0	0	1,000,000	1,000,000	1,000,000	0	0	0	0	0	3,000,000
18	Water Dist - Master Plan & Model (CIP & Dev Reimb)	0%	Treated	0%	Planning	0	0	300,000	0	0	0	0	0	0	0	0	300,000
19	Water Dist - Annual Waterline Replacement	0%	Treated	0%	Maintenance	0	500,000	0	500,000	1,000,000	500,000	1,000,000	500,000	1,000,000	500,000	0	5,500,000
20	Water Dist - Interconnect with Little Thompson	100%	Treated	100%	New Infrastructure	0	0	300,000	0	0	0	0	0	0	0	0	300,000
21	Facility - C&D Water	100%	Treated	100%	New Infrastructure	0	0	0	0	0	0	0	1,000,000	0	0	0	1,000,000
22	Equip - Water Hydrant Gutting Tool	0%	Treated	0%	Equipment	0	25,000	0	0	0	0	0	0	0	0	0	25,000
23	Equip - Water Mini Vac Trailer - Valves	0%	Treated	0%	Equipment	0	30,000	0	0	0	0	0	0	100,000	0	0	130,000
24	Equip - 1/2 C&D (Water )Shoring	0%	Treated	0%	Equipment	0	10,000	0	0	0	0	0	0	0	0	0	10,000
25	Equip - 1/2 C&D (Water) Locator	0%	Treated	0%	Equipment	0	0	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	0	48,000
26	Equip - 1/2 C&D (Water) Crew Vehicles (250)	0%	Treated	0%	Equipment	0	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	0	1,080,000
27	Equip - 1/2 C&D (Water) Emergency Utility Van	0%	Treated	0%	Equipment	0	0	0	0	50,000	0	0	0	0	0	0	50,000
28	Equip - 1/2 C&D (Water) Tandum Dump Truck	0%	Treated	0%	Equipment	0	0	0	0	0	0	100,000	0	0	0	0	100,000
29	Equip - 1/2 C&D (Water)Backhoe	0%	Treated	0%	Equipment	0	0	0	0	0	0	0	0	0	75,000	0	75,000
30	Equip - 1/2 C&D (Water) Mini Ex	0%	Treated	0%	Equipment	0	0	0	0	0	40,000	0	0	0	0	0	40,000
31	WTP R&R	0%	Treated	0%	Maintenance	0	0	0	1,337,500	1,481,600	1,641,100	1,817,900	2,013,700	4,198,384	2,622,719	0	15,112,903
32	Total Capital Improvement Program (Excluding Inflation)					15,523,280	45,685,000	73,783,000	3,008,500	3,702,600	3,307,100	5,588,900	5,912,424	44,423,396	27,115,146	0	228,049,346

Source: 2-9 Updated 10 Year CIP





Town of Johnstown  
 Water Utility  
 2024 Test Year Revenue Requirement

Table A-7

Line No.	Description	Operating Expense	Capital Expense	Total
	Revenue Requirements			
1	Operating & Maintenance Expense	5,095,934		5,095,934
2	Repair & Replacement Capital		3,328,325	3,328,325
3	Transfer Out	0		0
4	Total Revenue Requirements	5,095,934 60.5%	3,328,325 39.5%	8,424,259
	Revenue Requirement Adjustments			
5	Miscellaneous Revenue	(375,000)		(375,000)
6	Municipal Water Sales (Raw and Potable)	(45,685)		(45,685)
7	Raw Water Irrigation Sales	(56,135)		(56,135)
8	Investment Income	(17,282)		(17,282)
9	Operating Reserve Increase (Decrease)	(571,017)	(372,951)	(943,968)
10	Subtotal Revenue Offsets	(1,065,119)	(372,951)	(1,438,070)
11	Net Revenue Requirement	4,030,814	2,955,374	6,986,189

Town of Johnstown  
 Water Utility  
 Non-Rate Revenue Functional Allocations

Table A-8

Line No.	Description	CAP/OP	Test Year 2024	Volume			Customer Related				All Other General
				Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Indirect	Not Used	
Non-Rate Revenue											
1	HYDRANT RENTAL/BULK WATER	OP	235,000			100.0%					
2	WATER LEASE	OP	15,000	100.0%							
3	Miscellaneous	OP	125,000								100.0%
4	Municipal Water Sales (Raw and Potable)	OP	45,685	100.0%							
5	Raw Water Irrigation Sales	OP	56,135	100.0%							
6	Total Non-Rate Revenue		476,819								
-----											
Non-Rate Revenue											
1	HYDRANT RENTAL/BULK WATER	OP	235,000	-	-	235,000	-	-	-	-	-
2	WATER LEASE	OP	15,000	15,000	-	-	-	-	-	-	-
3	Miscellaneous	OP	125,000	-	-	-	-	-	-	-	125,000
4	Municipal Water Sales (Raw and Potable)	OP	45,685	45,685	-	-	-	-	-	-	-
5	Raw Water Irrigation Sales	OP	56,135	56,135	-	-	-	-	-	-	-
6	Total Non-Rate Revenue		476,819	116,819	0	235,000	0	0	0	0	125,000
7	Percent of Total			24.5%	0.0%	49.3%	0.0%	0.0%	0.0%	0.0%	26.2%

Town of Johnstown  
Water Utility  
FTE Allocation

Table A-9

Line No.	W/WW Split	Title	Salary	Adjusted Salary	Transmission/ Distribution	Meters	Billing/Customer Service	WTP Operations
1	100%	Water Meter Technician	61,750	61,750		100.0%		
2	50%	Water & Sewer System Operator 2	51,500	25,750	100.0%			
3	50%	Water & Sewer System Operator 2 - 2	54,800	27,400	100.0%			
4	50%	Water & Sewer System Operator 2 - 3	61,000	30,500	100.0%			
5	100%	Water Treatment Operator 2	60,500	60,500				100.0%
6	100%	Water Treatment Operator 2	59,400	59,400				100.0%
7	100%	Backflow and Water Quality	66,100	66,100	100.0%			
8	100%	Water Treatment Operator 3	66,500	66,500				100.0%
9	100%	Water Treatment Chief Operator	103,000	103,000				100.0%
10	100%	Water Treatment Superintendent	112,400	112,400				100.0%
11	50%	Water & Sewer System Superintendent	112,400	56,200				100.0%
12	50%	Utilities Director	151,000	75,500			100.0%	
13	100%	Admin	130,000	130,000			100.0%	
14		Total	1,090,350	875,000				
15	100%	Water Meter Technician		61,750	-	61,750	-	-
16	50%	Water & Sewer System Operator 2 - 1		25,750	25,750	-	-	-
17	50%	Water & Sewer System Operator 2 - 2		27,400	27,400	-	-	-
18	50%	Water & Sewer System Operator 2 - 3		30,500	30,500	-	-	-
19	100%	Water Treatment Operator 2		60,500	-	-	-	60,500
20	100%	Water Treatment Operator 2		59,400	-	-	-	59,400
21	100%	Backflow and Water Quality		66,100	66,100	-	-	-
22	100%	Water Treatment Operator 3		66,500	-	-	-	66,500
23	100%	Water Treatment Chief Operator		103,000	-	-	-	103,000
24	100%	Water Treatment Superintendent		112,400	-	-	-	112,400
25	50%	Water & Sewer System Superintendent		56,200	-	-	-	56,200
26	50%	Utilities Director		75,500	-	-	75,500	-
27	100%	Admin		130,000	-	-	130,000	-
28		Total		875,000	149,750	61,750	205,500	458,000
29		<i>Net Annual FTE Allocation</i>			17.1%	7.1%	23.5%	52.3%

Town of Johnstown  
 Water Utility  
 Allocation of Water System Assets And Annual Capital Costs

Table A-11

Line No.	Description	RCN	Volume		Customer Related					Total	
			Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Indirect	Not Used		All Other General
	Water System Assets										
1	Land	109,962	100.0%								100.0%
2	Source of Supply	5,437,795	100.0%								100.0%
3	Treatment	10,568,721	40.3%	59.7%							100.0%
4	Pump Station	404,777	40.3%	59.7%							100.0%
5	Treated Storage	18,701,476	26.8%	39.8%	33.3%						100.0%
6	Meters & Services	23,400				100.0%					100.0%
7	All Other General	4,092,069								100.0%	100.0%
8	Estimated T&D Main RC	233,366,429	26.8%	39.8%	33.3%						100.0%
8	Total	272,704,630									

Town of Johnstown  
 Water Utility  
 Allocation of Water System Assets  
 And Annual Capital Costs

Table A-12

Line No.	Description	RCLD	Volume		Customer Related					Total	
			Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Indirect	Not Used		All Other General
	Water System Assets										
1	Land	109,962	109,962	-	-	-	-	-	-	-	109,962
2	Source of Supply	5,437,795	5,437,795	-	-	-	-	-	-	-	5,437,795
3	Treatment	10,568,721	4,254,569	6,314,152	-	-	-	-	-	-	10,568,721
4	Pump Station	404,777	162,948	241,829	-	-	-	-	-	-	404,777
5	Treated Storage	18,701,476	5,019,006	7,448,644	-	-	-	-	-	-	18,701,476
6	Transmission Distribution	-	-	-	-	-	-	-	-	-	0
7	All Other General	4,092,069	-	-	-	-	-	-	-	4,092,069	4,092,069
8	Estimated T&D Main Replacement Cost	233,366,429	62,629,686	92,947,933	77,788,810	-	-	-	-	-	233,366,429
8	<b>Total Water System Assets</b>	<b>272,704,630</b>	<b>77,613,967</b>	<b>106,952,559</b>	<b>84,022,635</b>	<b>23,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,092,069</b>	<b>272,704,630</b>
9	Percent of Total		28.5%	39.2%	30.8%	0.0%	0.0%	0.0%	0.0%	1.5%	
10	<i>All Other General Allocation, %</i>		28.9%	39.8%	31.3%	0.0%	0.0%	0.0%			
11	All Other General Allocation, \$		1,182,379	1,629,325	1,280,009	356	0	0			
12	Net Allocated Capital Costs	2,955,374	853,937	1,176,731	924,448	257	0	0			

Town of Johnstown  
Water Utility  
Operation and Maintenance Expense Functional Category Allocations

Table A-10

Line No.	Fund	Account Description	Test Year 2024	Source of Supply	Treatment	Unused	Unused	Transmission & Distribution	Customer Billing	Meters & Services	Public Fire	Not Used	All Other Infrastructure	All Other General	Total	
			\$	%	%	%	%	%	%	%	%	%	%	%		
1	70	Water Fund BILLING AND ADMINISTRATIVE	20,000						100.0%						100.0%	
2	70	Water Fund CHEMICALS	1,099,800		100.0%										100.0%	
3	70	Water Fund COMPENSATED ABSENCES	6,360		52.3%			17.1%	23.5%	7.1%					100.0%	
4	70	Water Fund COMPUTERS AND SOFTWARE	115,800											100.0%	100.0%	
5	70	Water Fund FUEL AND LUBRICANTS	18,060											100.0%	100.0%	
6	70	Water Fund GROUP INSURANCE	157,940		52.3%			17.1%	23.5%	7.1%					100.0%	
7	70	Water Fund HYDRANTS	50,000								100.0%				100.0%	
8	70	Water Fund INSURANCE	67,798										100.0%		100.0%	
9	70	Water Fund MAINTENANCE - BUILDINGS	5,300		100.0%										100.0%	
10	70	Water Fund MAINTENANCE - EQUIPMENT	191,760		60.0%			40.0%							100.0%	
11	70	Water Fund MAINTENANCE - INFRASTRUCTURE	149,850		60.0%			40.0%							100.0%	
12	70	Water Fund MAINTENANCE - VEHICLES	13,420		60.0%			40.0%							100.0%	
13	70	Water Fund MEMBERSHIPS & SUBSCRIPTIONS	2,700		50.0%			50.0%							100.0%	
14	70	Water Fund MISCELLANEOUS	202,000					100.0%							100.0%	
15	70	Water Fund OTHER CONTRACTUAL SERVICES	238,070											100.0%	100.0%	
16	70	Water Fund OVERTIME	36,305		65.0%			30.0%		5.0%					100.0%	
17	70	Water Fund PAYROLL TAXES	60,950		52.3%			17.1%	23.5%	7.1%					100.0%	
18	70	Water Fund POSTAGE	6,000						100.0%						100.0%	
19	70	Water Fund PRINTING AND ADVERTISING	18,656						90.0%					10.0%	100.0%	
20	70	Water Fund PROFESSIONAL SERVICES	203,520		50.0%			50.0%							100.0%	
21	70	Water Fund RETIREMENT CONTRIBUTION	93,068		52.3%			17.1%	23.5%	7.1%					100.0%	
22	70	Water Fund SALARIES	907,248		52.3%			17.1%	23.5%	7.1%					100.0%	
23	70	Water Fund SUPPLIES - FLEET	7,400		50.0%			50.0%							100.0%	
24	70	Water Fund SUPPLIES - GENERAL	8,000		50.0%			50.0%							100.0%	
25	70	Water Fund SUPPLIES - JANITORIAL	1,060		100.0%										100.0%	
26	70	Water Fund SUPPLIES - LAB	31,800		95.0%			5.0%							100.0%	
27	70	Water Fund SUPPLIES - OPERATIONAL	49,950		40.0%			60.0%							100.0%	
28	70	Water Fund SUPPLIES - SAFETY	8,480		50.0%			50.0%							100.0%	
29	70	Water Fund SUPPLIES - TRAINING	5,300		50.0%			50.0%							100.0%	
30	70	Water Fund SUPPLIES - VEHICLES	8,000		50.0%			50.0%							100.0%	
31	70	Water Fund TELEPHONE & INTERNET	12,720		50.0%			50.0%							100.0%	
32	70	Water Fund TRAVEL & TRAINING	9,785		52.3%			17.1%	23.5%	7.1%					100.0%	
33	70	Water Fund UNEMPLOYMENT TAXES	12,190		52.3%			17.1%	23.5%	7.1%					100.0%	
34	70	Water Fund UNIFORMS	6,795		50.0%			45.0%		5.0%					100.0%	
35	70	Water Fund UTILITIES	253,000		100.0%										100.0%	
36	70	Water Fund WATER ASSESSMENTS	226,000		100.0%										100.0%	
37	70	Water Fund WATER METERS	321,000							100.0%					100.0%	
38	70	Water Fund WATER SHARES	351,900		100.0%										100.0%	
39	70	Water Fund WORKERS COMPENSATION	22,949		52.3%			17.1%	23.5%	7.1%					100.0%	
40	70	Water Fund C&D Lead Water (2024) [1]	95,000					100.0%							100.0%	
41		Total Operating & Maintenance Expense	5,095,934		577,900	2,442,435	0	0	830,017	341,174	412,815	50,000	0	67,798	373,796	5,095,934
42		Percent of Total			11.3%	47.9%	0.0%	0.0%	16.3%	6.7%	8.1%	1.0%	0.0%	1.3%	7.3%	100.0%
		[1] 50% water and sewer														
43		Total Allocation			577,900	2,442,435	0	0	830,017	341,174	412,815	50,000	0	67,798	373,796	5,095,934
44		All Other Infrastructure Reallocation			15.0%	63.4%	0.0%	0.0%	21.6%							
45		Total All Other Infrastructure			10,176	43,007	0	0	14,615					(67,798)		-
46		All Other General Reallocation			12.4%	52.5%	0.0%	0.0%	17.8%	7.3%	8.9%	1.1%	0.0%			
47		Total Reallocated All Other General			46,412	196,155	0	0	66,660	27,400	33,154	4,016	0		(373,796)	0.0%
48		Total After Reallocation			634,488	2,681,596	0	0	911,291	368,574	445,969	54,016	0	0	0	5,095,934
49		%			12.5%	52.6%	0.0%	0.0%	17.9%	7.2%	8.8%	1.1%	0.0%	0.0%	0.0%	100.0%

Town of Johnstown  
 Water Utility  
 Allocation of O&M Expenses

Table A-13

Line No.	Description	Total	Volume		Customer Related					Total	
			Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Indirect	Not Used		All Other General
Functional O&M											
1	Source of Supply	577,900	100.0%								100.0%
2	Treatment	2,442,435	54.6%	45.4%							100.0%
3	Transmission & Distribution	830,017	36.4%	30.2%	33.3%						100.0%
4	Customer Billing	341,174					100.0%				100.0%
5	Meters & Services	412,815				100.0%					100.0%
6	Public Fire	50,000		47.6%	52.4%						100.0%
7	All Other Infrastructure	67,798								100.0%	100.0%
8	All Other General	373,796								100.0%	100.0%
9	Total Functional O&M	5,095,934									

Line No.	Description	Total	Volume		Customer Related					Total	
			Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Indirect	Not Used		All Other General
Functional O&M											
1	Source of Supply	577,900	577,900	0	0	0	0	0	0	0	577,900
2	Wells / Treatment	2,442,435	1,334,664	1,107,771	0	0	0	0	0	0	2,442,435
3	Transmission Mains	830,017	302,374	250,970	276,672	0	0	0	0	0	830,017
4	Customer Billing	341,174	0	0	0	341,174	0	0	0	0	341,174
5	Meters & Services	412,815	0	0	0	412,815	0	0	0	0	412,815
6	Public Fire	50,000	0	23,782	26,218	0	0	0	0	0	50,000
7	All Other Infrastructure	67,798	0	0	0	0	0	0	0	67,798	67,798
8	All Other General	373,796	0	0	0	0	0	0	0	373,796	373,796
9	Total Functional O&M	5,095,934	2,214,938	1,382,523	302,890	412,815	341,174	0	0	441,593	5,095,934
10	Percent of Total		43.5%	27.1%	5.9%	8.1%	6.7%	0.0%	0.0%	8.7%	
11	Allocation of Reserves	(571,017)	(248,192)	(154,917)	(33,940)	(46,257)	(38,230)	-	-	(49,482)	(571,017)
12	Allocation of Investment Income	(17,282)	(7,512)	(4,689)	(1,027)	(1,400)	(1,157)	-	-	(1,498)	(17,282)
13	Allocation of Misc Revenue	(476,819)	(116,819)	0	(235,000)	0	0	0	0	(125,000)	(476,819)
14	Total Functional O&M With Misc Revenue Offsets	4,030,814	1,842,415	1,222,918	32,923	365,158	301,787	0	0	265,613	4,030,814
15	All Other General Reallocation, %		48.9%	32.5%	0.9%	9.7%	8.0%	0.0%			
16	All Other General Reallocation, \$	265,613	129,972	86,270	2,323	25,760	21,289	0			
17	Net O&M Revenue Requirement	4,030,814	1,972,387	1,309,188	35,245	390,918	323,077	0			4,030,814



Line No.	Customer Class	Water Use		Maximum Day Demand			Maximum Hour Demand			Bills	Common to All Equivalent Meters	
		Annual 1,000 gal	Average Day 1,000 gal	Demand Factor	Total Demand	Extra Demand	Demand Factor	Total Demand	Extra Demand		Capacity	Cost
1	Residential - In Town	632,030	1,732	4.66	8,063	6,331	6.98	12,094	4,031	70,627	70,627	70,627
2	Residential - Out of Town	2,348	6	4.66	30	24	6.98	45	15	197	197	197
3	Commercial - In Town	193,381	530	5.05	2,677	2,147	7.58	4,016	1,339	3,217	13,101	7,401
4	Commercial - Out of Town	3,024	8	5.05	42	34	7.58	63	21	36	573	274
5	Multifamily	31,048	85	2.66	226	141	3.99	340	113	743	3,462	2,101
6	Total	861,830	2,361		11,038	8,677		16,557	5,519	74,820	87,959	80,599

Town of Johnstown  
 Water Utility  
 Unit Costs of Service

Table A-16

Line No.	Description	Total	Volume		Customer Related					
			Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Not Used	Not Used	Not Used
Cost of Service										
1	Operation and Maintenance Expense	4,030,814	1,972,387	1,309,188	35,245	390,918	323,077	0	0	0
2	Capital Cost	2,955,374	853,937	1,176,731	924,448	257	0	0	0	0
3	Total Cost of Service	6,986,189	2,826,324	2,485,920	959,693	391,175	323,077	0	0	0
4	Percent of Total	100.0%	40.5%	35.6%	13.7%	5.6%	4.6%	0.0%	0.0%	0.0%
Units of Service										
	<u>Units</u>		<u>1,000 gal</u>	<u>gpd</u>	<u>gpd</u>	<u>Equivalent Meter Cost</u>	<u># Bills</u>	<u>Equivalent Meter Capacity</u>		
Total Units of Service										
5	Inside Town		856,458	8,620	5,483	80,128	74,587	87,190		
6	Outside Town	1.50	5,372	57	36	471	233	769		
7	Total Units of Service		861,830	8,677	5,519	80,599	74,820	87,959		
Unit Cost of Service										
8	Inside Town		\$3.27	\$285.56	\$173.33	\$4.84	\$4.31			
9	Outside Town		\$4.90	\$428.34	\$259.99	\$7.26	\$6.47			

Town of Johnstown  
 Water Utility  
 Customer Class Cost of Service

Table A-17

Line No.	Description	Total	Volume		Customer Related					
			Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Not Used	Not Used	Not Used
	Unit Cost of Service - \$/unit									
1	Inside Town		\$3.27	\$285.56	\$173.33	\$4.84	\$4.31	\$0.00	\$0.00	\$0.00
2	Outside Town		\$4.90	\$428.34	\$259.99	\$7.26	\$6.47	\$0.00	\$0.00	\$0.00
	Customer Class									
	Residential - In Town		\$7.24							
3	Units		632,030	6,331	4,031	70,627	70,627	70,627	70,627	70,627
4	Cost of Service - \$	\$5,219,157	\$2,066,268	\$1,807,889	\$698,724	\$341,778	\$304,498	\$0	\$0	\$0
	Residential - Out of Town		\$10.85							
5	Units		2,348	24	15	197	197	197	197	197
6	Cost of Service - \$	\$28,179	\$11,513	\$10,073	\$3,893	\$1,427	\$1,272	\$0	\$0	\$0
	Commercial - In Town		\$7.64							
7	Units		193,381	2,147	1,339	7,401	3,217	13,101	13,101	3,217
8	Cost of Service - \$	\$1,527,090	\$632,212	\$613,188	\$232,006	\$35,813	\$13,871	\$0	\$0	\$0
	Commercial - Out of Town		\$11.46							
9	Units		3,024	34	21	274	36	573	573	36
10	Cost of Service - \$	\$36,877	\$14,829	\$14,383	\$5,442	\$1,990	\$233	\$0	\$0	\$0
	Multifamily		\$5.20							
11	Units		31,048	141	113	2,101	743	3,462	3,462	743
12	Cost of Service - \$	\$174,886	\$101,502	\$40,385	\$19,628	\$10,167	\$3,203	\$0	\$0	\$0
13	Total Cost of Service	\$6,986,189	\$2,826,324	\$2,485,920	\$959,693	\$391,175	\$323,077	\$0	\$0	\$0

Town of Johnstown  
 Water Utility  
 Comparison of Cost of Service With Revenues Under Existing Rates

Table A-18

Line No.	Customer Class	Cost of Service	Revenue Under Existing Rates	Change - \$	Change - %
			-		
	Residential - In Town	5,219,157	4,080,833	1,138,324	28%
	Residential - Out of Town	28,179	22,376	5,803	26%
	Commercial - In Town	1,527,090	976,264	550,826	56%
	Commercial - Out of Town	36,877	37,192	(315)	-1%
	Multifamily	174,886	257,326	(82,440)	-32%
	Total	6,986,189	5,373,991	1,612,197	30%

Town of Johnstown  
 Water Utility  
 Comparison of Adjusted Cost of Service With Revenues Under Existing Rates

Table A-19

Line No.	Customer Class	Cost of Service	Multifamily Adjustment	Adjusted COS	Revenue Under Existing Rates	Change - \$	Change - %
1	Residential - In Town	5,219,157	(63,170)	5,155,987	4,080,833	1,075,154	26.3%
2	Residential - Out of Town	28,179	(341)	27,838	22,376	5,462	24.4%
3	Commercial - In Town	1,527,090	(18,483)	1,508,607	976,264	532,343	54.5%
4	Commercial - Out of Town	36,877	(446)	36,431	37,192	(761)	-2.0%
5	Multifamily	174,886	82,440	257,326	257,326	-	0.0%
6	Total System	6,986,189	0	6,986,189	5,373,991	1,612,197	30.0%

Town of Johnstown  
Water Utility  
Proposed Residential Rates

Table A-20

Town of Johnstown  
Water Utility  
Multifamily Proposed Rates - Existing \$ per Unit Charge

Table A-21

Town of Johnstown  
Water Utility  
Proposed Commercial Rates

Table A-22

Residential Cost of Service								\$5,155,987
Meter Size Inches	Bills	S.C.	Revenue					
5/8 inch	70,627	\$29.69	\$2,097,055					
Total Service Charge Revenue			\$2,097,055					
Volume Rate Revenue Required			\$3,058,932					
Threshold	% Vol	Price Ratio	Cumulative Price Ratio	Volume	Rate	Revenue		
5	41.8%		1.00	263,890	\$3.68	971,445		
10	23.5%	1.15	1.15	148,679	4.23	629,423		
15	14.9%	1.20	1.38	94,200	5.08	478,546		
20	8.9%	1.25	1.73	56,289	6.35	357,442		
25	5.0%	1.25	2.16	31,378	7.94	249,069		
9999	5.9%	1.25	2.70	37,594	9.92	373,007		
Total				632,030	\$4.84	3,058,932		
				Rounded				
				263,890	\$3.69	973,756		
				148,679	4.24	630,400		
				94,200	5.09	479,477		
				56,289	6.37	358,560		
				31,378	7.96	249,770		
				37,594	9.95	374,056		
				632,030	\$4.85	3,066,018		
				Over/Under Recovery		7,086		

Multifamily Cost of Service								\$257,326
Meter Size Inches	Bills	S.C.	Revenue					
# of Units x 12	13,552	\$14.85	\$201,197					
Total Service Charge Revenue			\$201,197					
Volume Rate Revenue Required			\$56,129					
Threshold	% Vol	Ratio	Volume	Rate	Revenue			
100	92.6%	1.00	28,741	\$4.13	118,702			
99999	7.4%	1.52	2,306	6.29	14,496			
Total			31,048	\$4.29	133,198			
			Rounded					
			28,741	\$4.13	118,702			
			2,306	6.29	14,506			
			31,048		133,208			
			Over/Under Recovery		77,069			

Commercial Cost of Service					\$1,508,607	
Meter Size Inches	Bills	S.C.	Revenue			
5/8 inch	1,079	\$29.69	\$32,027			
1 inch	1,061	\$50.48	\$53,570			
1.5 inch	540	\$98.01	\$52,915			
2 inch	475	\$157.39	\$74,743			
3 inch	49	\$347.44	\$16,943			
4 inch	14	\$623.62	\$8,689			
6 inch	0	\$1,285.73	\$0			
Total Service Charge Revenue			\$238,887			
Volume Rate Revenue Required			\$1,269,720			
Threshold	% Vol	Ratio	Volume	Rate	Revenue	
All Usage	100.0%	1.00	193,381	\$6.57	1,269,720	
Total				193,381	\$6.57	1,269,720
				Rounded		
				193,381	6.57	1,270,512
				193,381		1,270,512
				Over/Under Recovery		793

APPENDIX B:

# **Sewer Utility Financial Plan**

Town of Johnstown  
Sewer Utility  
Decision Criteria Dashboard

Table B-1

OPERATING FUND	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Months Increase is Effective in First Year	0	12	12	12	12	12	12	12	12	12
Annualized Percentage Increase	0.0%	15.0%	15.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cumulative Increase	0.0%	15.0%	32.3%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%
Transfer from General Fund	0	0	0	0	0	0	0	0	0	0
Transfer to Capital Fund	0	0	0	0	0	0	0	0	0	3,200,000
Raftelis Recommended Target (Greater of Operating and Depreciation Expense or \$2.0M)										
Operating Fund Ending Balance	2,997,839	3,543,712	4,062,184	4,792,807	4,430,134	5,098,255	5,092,130	5,860,726	6,146,446	3,192,673
Target Fund Balance	2,000,000	2,010,000	2,280,000	2,380,000	2,490,000	2,660,000	2,800,000	2,950,000	3,070,000	3,210,000
Over/(Under) Target	997,839	1,533,712	1,782,184	2,412,807	1,940,134	2,438,255	2,292,130	2,910,726	3,076,446	(17,327)
<b>CAPITAL EXPANSION FUND</b>										
Transfer from General Fund	50,000,000	0	0	0	0	0	0	0	0	0
Transfer to Operating Fund	0	0	0	0	0	0	0	0	0	0
Revenue Bond Issuance Proceeds	0	0	0	0	0	0	0	0	0	21,500,000
Future State Loans	0	0	0	0	0	0	0	0	0	0
State Loans Already Issued	0	0	0	0	0	0	0	0	0	0
Growth-Related Capital	35,500,000	43,367,500	13,104,300	1,312,341	1,252,145	62,309	65,113	1,428,905	14,292,111	29,796,208
Ending Capital Fund Balance	60,936,211	22,939,036	13,367,769	15,583,641	16,931,856	19,489,252	22,071,539	20,681,834	6,347,473	6,965
<b>Combined Sewer Enterprise Fund</b>										
Combined Sewer Fund Ending Balance	63,934,050	26,482,748	17,429,953	20,376,448	21,361,989	24,587,507	27,163,669	26,542,560	12,493,919	3,199,638
Raftelis Recommended Target (Greater of Operating and Depreciation Expense or \$2.0M)										
Greater of Operating and Depreciation Expense or \$2.0M	2,000,000	2,010,000	2,280,000	2,380,000	2,490,000	2,660,000	2,800,000	2,950,000	3,070,000	3,210,000
Over/(Under) Target	61,934,050	24,472,748	15,149,953	17,996,448	18,871,989	21,927,507	24,363,669	23,592,560	9,423,919	(10,362)
Debt Service Coverage										
Including Tap Fee Revenue	3.46	3.26	2.57	2.88	2.59	2.57	2.60	1.36	1.38	1.16
Excluding Tap Fee Revenue	0.98	0.47	0.34	0.64	0.70	0.68	0.70	0.38	0.41	0.35



Town of Johnstown  
Sewer Utility  
Combined Water Enterprise Fund

Table B-1

Line No.	Description	Budget					Projected				
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
		\$	\$	\$	\$	\$	\$	\$	\$	\$	
<i>Sources of Funds</i>											
1	Revenue from Existing Water Service Rates	3,121,395	3,336,407	3,567,307	3,815,356	4,081,923	4,368,494	4,676,683	5,008,246	5,365,089	5,749,287
2	Additional Water Sales Revenue Required	0	500,461	1,150,457	1,987,324	2,126,172	2,275,439	2,435,967	2,608,670	2,794,541	2,994,660
3	Total Water Service Rate Revenue	3,121,395	3,836,868	4,717,764	5,802,680	6,208,094	6,643,933	7,112,651	7,616,916	8,159,630	8,743,947
4	Miscellaneous Revenue	45,000	25,000	26,000	27,000	28,000	29,000	30,000	31,000	32,000	33,000
5	Municipal Sewer Sales	37,154	37,154	37,154	37,154	37,154	37,154	37,154	37,154	37,154	37,154
6	Tap Fees	6,835,000	7,687,975	6,121,399	6,148,356	5,205,682	5,206,000	5,206,000	5,206,000	5,206,000	5,206,000
7	Future State Loans	0	0	0	0	0	0	0	0	0	0
8	Transfer From General Fund	50,000,000	0	0	0	0	0	0	0	0	0
9	Investment Income	1,850,000	500,000	219,378	188,846	208,506	229,562	258,566	268,379	194,950	46,510
10	Revenue Bond Issuance Proceeds	0	0	0	0	0	0	0	0	0	21,500,000
11	Total Sources	61,888,549	12,086,998	11,121,695	12,204,037	11,687,437	12,145,649	12,644,371	13,159,449	13,629,735	35,566,612
<i>Uses of Funds</i>											
12	Operation and Maintenance Expense	2,315,710	3,063,525	4,015,271	4,254,815	4,516,237	5,028,921	5,457,809	5,867,395	6,202,536	6,554,657
<i>Debt Service</i>											
13	Existing - Bonds/Loans	2,763,150	2,767,650	2,769,900	2,764,900	2,767,900	2,768,400	2,766,400	2,766,900	2,769,650	2,769,400
14	Proposed - Bonds/Loans	0	0	0	0	0	0	0	2,613,700	2,613,700	3,680,900
15	Total Debt Service	2,763,150	2,767,650	2,769,900	2,764,900	2,767,900	2,768,400	2,766,400	5,380,600	5,383,350	6,450,300
16	Total Capital	35,575,000	43,707,125	13,389,319	2,237,827	3,417,758	1,122,810	1,844,000	2,532,564	16,092,491	31,855,935
17	Total Uses	40,653,860	49,538,300	20,174,490	9,257,541	10,701,896	8,920,131	10,068,210	13,780,559	27,678,376	44,860,892
18	Annual Surplus (Deficiency)	21,234,689	(37,451,302)	(9,052,795)	2,946,495	985,541	3,225,518	2,576,162	(621,109)	(14,048,641)	(9,294,281)
19	Beginning Balance	42,699,361	63,934,050	26,482,748	17,429,953	20,376,448	21,361,989	24,587,507	27,163,669	26,542,560	12,493,919
20	Ending Balance	63,934,050	26,482,748	17,429,953	20,376,448	21,361,989	24,587,507	27,163,669	26,542,560	12,493,919	3,199,638
<i>Greater of Operating and Depreciation Expense or \$2.0 M</i>											
21	Operations and Maintenance (90 Days O&M)	580,000	770,000	1,000,000	1,060,000	1,130,000	1,260,000	1,360,000	1,470,000	1,550,000	1,640,000
22	Capital Reserve (1-year Depreciation Expense)	1,200,000	1,240,000	1,280,000	1,320,000	1,360,000	1,400,000	1,440,000	1,480,000	1,520,000	1,570,000
23	Total	1,780,000	2,010,000	2,280,000	2,380,000	2,490,000	2,660,000	2,800,000	2,950,000	3,070,000	3,210,000
24	Reserve Target	2,000,000	2,010,000	2,280,000	2,380,000	2,490,000	2,660,000	2,800,000	2,950,000	3,070,000	3,210,000
25	Over/(Under) Proposed Reserve Target	61,934,050	24,472,748	15,149,953	17,996,448	18,871,989	21,927,507	24,363,669	23,592,560	9,423,919	(10,362)
26	Annualized Water Service Revenue Increase	0.0%	15.0%	15.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<i>Debt Service Coverage</i>											
27	Including Tap Fee Revenue	3.46	3.26	2.57	2.88	2.59	2.57	2.60	1.36	1.38	1.16
28	Excluding Tap Fee Revenue	0.98	0.47	0.34	0.64	0.70	0.68	0.70	0.38	0.41	0.35

Town of Johnstown  
Sewer Utility  
Capital Expansion Fund Cash Flow Analysis

Table B-2

Line No.	Description	Budget		Projected							
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Sources of Funds											
1	Tap Fees	6,835,000	7,687,975	6,121,399	6,148,356	5,205,682	5,206,000	5,206,000	5,206,000	5,206,000	5,206,000
2	Investment Income	1,665,000	450,000	181,534	144,757	162,577	182,106	207,800	213,800	135,100	0
3	Transfer from General Fund	50,000,000	0	0	0	0	0	0	0	0	0
4	Transfer from Operating Fund	0	0	0	0	0	0	0	0	0	3,200,000
5	State Loan Proceeds	0	0	0	0	0	0	0	0	0	0
6	Revenue Bond Issuance Proceeds	0	0	0	0	0	0	0	0	0	21,500,000
7	Total Sources	58,500,000	8,137,975	6,302,933	6,293,114	5,368,259	5,388,106	5,413,800	5,419,800	5,341,100	29,906,000
Uses of Funds											
8	Capital Projects	35,500,000	43,367,500	13,104,300	1,312,341	1,252,145	62,309	65,113	1,428,905	14,292,111	29,796,208
9	Transfer To Operating Fund	0	0	0	0	0	0	0	0	0	0
Debt Service											
10	Existing	2,763,150	2,767,650	2,769,900	2,764,900	2,767,900	2,768,400	2,766,400	2,766,900	2,769,650	2,769,400
11	Proposed	0	0	0	0	0	0	0	0	0	1,067,200
12	Intrafund Loan Payment	0	0	0	0	0	0	0	2,613,700	2,613,700	2,613,700
13	Total Uses	38,263,150	46,135,150	15,874,200	4,077,241	4,020,045	2,830,709	2,831,513	6,809,505	19,675,461	36,246,508
14	Annual Surplus (Deficiency)	20,236,850	(37,997,175)	(9,571,267)	2,215,872	1,348,214	2,557,396	2,582,287	(1,389,705)	(14,334,361)	(6,340,508)
15	Beginning Balance	40,699,361	60,936,211	22,939,036	13,367,769	15,583,641	16,931,856	19,489,252	22,071,539	20,681,834	6,347,473
16	Ending Balance	60,936,211	22,939,036	13,367,769	15,583,641	16,931,856	19,489,252	22,071,539	20,681,834	6,347,473	6,965

Town of Johnstown  
Sewer Utility  
Operating Fund Cash Flow Analysis

Table B-3

Line No.	Description	Budget		Projected							
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Sources of Funds</b>											
1	Revenue from Existing Sewer Rates	3,121,395	3,336,407	3,567,307	3,815,356	4,081,923	4,368,494	4,676,683	5,008,246	5,365,089	5,749,287
2	Additional Service Revenue Required	0	500,461	1,150,457	1,987,324	2,126,172	2,275,439	2,435,967	2,608,670	2,794,541	2,994,660
3	<b>Total Sewer Service Rate Revenue</b>	<b>3,121,395</b>	<b>3,836,868</b>	<b>4,717,764</b>	<b>5,802,680</b>	<b>6,208,094</b>	<b>6,643,933</b>	<b>7,112,651</b>	<b>7,616,916</b>	<b>8,159,630</b>	<b>8,743,947</b>
4	Miscellaneous Revenue	45,000	25,000	26,000	27,000	28,000	29,000	30,000	31,000	32,000	33,000
6	Municipal Sewer Sales	37,154	37,154	37,154	37,154	37,154	37,154	37,154	37,154	37,154	37,154
7	Transfer from Capital Fund	0	0	0	0	0	0	0	0	0	0
8	Investment Income	185,000	50,000	37,844	44,089	45,929	47,456	50,766	54,579	59,850	46,510
9	<b>Total Sources</b>	<b>3,388,549</b>	<b>3,949,023</b>	<b>4,818,762</b>	<b>5,910,923</b>	<b>6,319,178</b>	<b>6,757,543</b>	<b>7,230,571</b>	<b>7,739,649</b>	<b>8,288,635</b>	<b>8,860,612</b>
<b>Uses of Funds</b>											
10	Operation and Maintenance Expense	2,315,710	3,063,525	4,015,271	4,254,815	4,516,237	5,028,921	5,457,809	5,867,395	6,202,536	6,554,657
11	Transfer to Capital Fund	0	0	0	0	0	0	0	0	0	3,200,000
12	Repair and Replacement Projects	75,000	339,625	285,019	925,486	2,165,614	1,060,501	1,778,887	1,103,659	1,800,379	2,059,728
13	<b>Total Uses of Funds</b>	<b>2,390,710</b>	<b>3,403,150</b>	<b>4,300,290</b>	<b>5,180,300</b>	<b>6,681,851</b>	<b>6,089,422</b>	<b>7,236,697</b>	<b>6,971,054</b>	<b>8,002,915</b>	<b>11,814,385</b>
14	Annual Surplus (Deficiency)	997,839	545,873	518,472	730,623	(362,673)	668,122	(6,125)	768,596	285,720	(2,953,773)
15	Beginning Balance	2,000,000	2,997,839	3,543,712	4,062,184	4,792,807	4,430,134	5,098,255	5,092,130	5,860,726	6,146,446
16	<b>Ending Balance</b>	<b>2,997,839</b>	<b>3,543,712</b>	<b>4,062,184</b>	<b>4,792,807</b>	<b>4,430,134</b>	<b>5,098,255</b>	<b>5,092,130</b>	<b>5,860,726</b>	<b>6,146,446</b>	<b>3,192,673</b>
<hr/>											
<i>Greater of Operating and Depreciation Expense or \$2.0 M</i>											
17	<i>Operations and Maintenance (90 Days O&amp;M)</i>	<i>580,000</i>	<i>770,000</i>	<i>1,000,000</i>	<i>1,060,000</i>	<i>1,130,000</i>	<i>1,260,000</i>	<i>1,360,000</i>	<i>1,470,000</i>	<i>1,550,000</i>	<i>1,640,000</i>
18	<i>Capital Reserve (1-year Depreciation Expense)</i>	<i>1,200,000</i>	<i>1,240,000</i>	<i>1,280,000</i>	<i>1,320,000</i>	<i>1,360,000</i>	<i>1,400,000</i>	<i>1,440,000</i>	<i>1,480,000</i>	<i>1,520,000</i>	<i>1,570,000</i>
19	<b>Total</b>	<b>1,780,000</b>	<b>2,010,000</b>	<b>2,280,000</b>	<b>2,380,000</b>	<b>2,490,000</b>	<b>2,660,000</b>	<b>2,800,000</b>	<b>2,950,000</b>	<b>3,070,000</b>	<b>3,210,000</b>
20	<i>Reserve Target</i>	<i>2,000,000</i>	<i>2,010,000</i>	<i>2,280,000</i>	<i>2,380,000</i>	<i>2,490,000</i>	<i>2,660,000</i>	<i>2,800,000</i>	<i>2,950,000</i>	<i>3,070,000</i>	<i>3,210,000</i>
20	Over/(Under) Proposed Reserve Target	997,839	1,533,712	1,782,184	2,412,807	1,940,134	2,438,255	2,292,130	2,910,726	3,076,446	(17,327)
21	Annual Sewer Revenue Increase	0.0%	15.0%	15.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Town of Johnstown  
Sewer Utility  
Budget & Projected Operation and Maintenance Expense

Table B-4

Line No.	Account Description	Inflation Coding	Budget	Projected									
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	BILLING AND ADMINISTRATIVE	MO	20,000	20,000	21,200	22,500	23,900	25,300	26,800	28,400	30,100	31,900	
2	CHEMICALS	C	200,000	256,000	265,000	274,300	283,900	293,800	304,100	314,700	325,700	337,100	
3	CHEMICALS	C	15,000	0	0	0	0	0	0	0	0	0	
4	NEW LOW POINT WWTP - CHEMICALS	C	0	105,916	163,660	229,154	299,032	373,521	452,858	537,291	627,079	722,494	
5	NEW CENTRAL WWTP - CHEMICALS	C	0	0	241,118	272,341	314,189	358,633	405,804	455,837	508,875	565,067	
6	COMPENSATED ABSENCES	E	4,500	4,800	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	
7	COMPENSATED ABSENCES	E	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	
9	COMPUTERS AND SOFTWARE	MO	500	9,000	9,500	10,100	10,700	11,300	12,000	12,700	13,500	14,300	
10	FUEL & LUBRICANTS	MO	9,000	9,800	10,400	11,000	11,700	12,400	13,100	13,900	14,700	15,600	
11	FUEL & LUBRICANTS	MO	5,000	9,300	9,900	10,500	11,100	11,800	12,500	13,300	14,100	14,900	
12	GROUP INSURANCE	E	19,400	21,300	22,200	23,100	24,000	25,000	26,000	27,000	28,100	29,200	
13	GROUP INSURANCE	E	48,250	53,100	55,200	57,400	59,700	62,100	64,600	67,200	69,900	72,700	
14	GROUP INSURANCE	E	33,500	36,900	38,400	39,900	41,500	43,200	44,900	46,700	48,600	50,500	
15	INSURANCE	O	55,000	66,300	66,300	66,300	66,300	66,300	66,300	66,300	66,300	66,300	
16	MAINTENANCE - BUILDINGS	MO	7,500	3,800	4,000	4,200	4,500	4,800	5,100	5,400	5,700	6,000	
17	MAINTENANCE - EQUIPMENT	MO	90,000	47,700	50,600	53,600	56,800	60,200	63,800	67,600	71,700	76,000	
18	MAINTENANCE - EQUIPMENT	MO	5,000	6,000	6,400	6,800	7,200	7,600	8,100	8,600	9,100	9,600	
19	MAINTENANCE - INFRASTRUCTURE	MO	25,000	69,800	74,000	78,400	83,100	88,100	93,400	99,000	104,900	111,200	
20	MAINTENANCE - INFRASTRUCTURE	MO	100,000	75,600	80,100	84,900	90,000	95,400	101,100	107,200	113,600	120,400	
21	MAINTENANCE - VEHICLES	MO	3,000	6,800	7,200	7,600	8,100	8,600	9,100	9,600	10,200	10,800	
22	MAINTENANCE - VEHICLES	MO	3,000	5,000	5,300	5,600	5,900	6,300	6,700	7,100	7,500	8,000	
23	MEMBERSHIPS & SUBSCRIPTIONS	O	1,350	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	
24	MEMBERSHIPS & SUBSCRIPTIONS	O	1,350	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	
25	MISCELLANEOUS	O	500	0	0	0	0	0	0	0	0	0	
26	OTHER CONTRACTUAL SERVICES	PS	55,700	68,800	71,600	74,500	77,500	80,600	83,800	87,200	90,700	94,300	
27	OTHER CONTRACTUAL SERVICES	PS	379,000	203,800	212,000	220,500	229,300	238,500	248,000	257,900	268,200	278,900	
28	OTHER CONTRACTUAL SERVICES	PS	127,000	181,900	189,200	196,800	204,700	212,900	221,400	230,300	239,500	249,100	
29	OVERTIME	E	500	500	500	500	500	500	500	500	500	500	
30	OVERTIME	E	23,250	24,600	25,600	26,600	27,700	28,800	30,000	31,200	32,400	33,700	
31	OVERTIME	E	10,500	11,100	11,500	12,000	12,500	13,000	13,500	14,000	14,600	15,200	
32	PAYROLL TAXES	E	7,100	7,500	7,800	8,100	8,400	8,700	9,000	9,400	9,800	10,200	
33	PAYROLL TAXES	E	19,100	20,200	21,000	21,800	22,700	23,600	24,500	25,500	26,500	27,600	
34	PAYROLL TAXES	E	9,500	10,100	10,500	10,900	11,300	11,800	12,300	12,800	13,300	13,800	
35	POSTAGE	MO	500	500	500	500	500	500	500	500	500	500	
36	POSTAGE	MO	250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	
37	PRINTING & ADVERTISING	MO	15,500	16,400	17,400	18,400	19,500	20,700	21,900	23,200	24,600	26,100	
38	PRINTING & ADVERTISING	MO	500	500	500	500	500	500	500	500	500	500	
39	PRINTING & ADVERTISING	MO	500	500	500	500	500	500	500	500	500	500	
40	PROFESSIONAL SERVICES	MO	20,000	10,000	10,600	11,200	11,900	12,600	13,400	14,200	15,100	16,000	
41	PROFESSIONAL SERVICES	MO	20,000	10,000	10,600	11,200	11,900	12,600	13,400	14,200	15,100	16,000	
42	RENTS	MO	5,000	5,300	5,600	5,900	6,300	6,700	7,100	7,500	8,000	8,500	
43	RETIREMENT CONTRIBUTION	E	10,900	11,600	12,100	12,600	13,100	13,600	14,100	14,700	15,300	15,900	
44	RETIREMENT CONTRIBUTION	E	29,900	59,800	62,200	64,700	67,300	70,000	72,800	75,700	78,700	81,800	
45	RETIREMENT CONTRIBUTION	E	13,200	14,000	14,600	15,200	15,800	16,400	17,100	17,800	18,500	19,200	
46	SALARIES	E	95,800	101,500	105,600	109,800	114,200	118,800	123,600	128,500	133,600	138,900	
47	SALARIES	E	243,000	464,100	482,700	502,000	522,100	543,000	564,700	587,300	610,800	635,200	

Town of Johnstown  
Sewer Utility  
Budget & Projected Operation and Maintenance Expense

Table B-4

Line No.	Account Description	Inflation Coding	Budget	Projected									
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
48	SALARIES	E	111,400	170,400	177,200	184,300	191,700	199,400	207,400	215,700	224,300	233,300	
49	SUPPLIES - BUILDING	MO	3,500	2,500	2,700	2,900	3,100	3,300	3,500	3,700	3,900	4,100	
50	SUPPLIES - FLEET	MO	1,000	7,200	7,600	8,100	8,600	9,100	9,600	10,200	10,800	11,400	
51	SUPPLIES - GENERAL	MO	5,000	5,300	5,600	5,900	6,300	6,700	7,100	7,500	8,000	8,500	
52	SUPPLIES - GENERAL	MO	5,000	5,300	5,600	5,900	6,300	6,700	7,100	7,500	8,000	8,500	
53	SUPPLIES - JANITORIAL	MO	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	
54	SUPPLIES - LAB	MO	12,000	8,100	8,600	9,100	9,600	10,200	10,800	11,400	12,100	12,800	
55	SUPPLIES - OFFICE	MO	250	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	
56	SUPPLIES - OPERATIONAL	MO	15,000	15,000	15,900	16,900	17,900	19,000	20,100	21,300	22,600	24,000	
57	SUPPLIES - OPERATIONAL	MO	15,000	20,000	21,200	22,500	23,900	25,300	26,800	28,400	30,100	31,900	
58	SUPPLIES - SAFETY	MO	1,500	5,000	5,300	5,600	5,900	6,300	6,700	7,100	7,500	8,000	
59	SUPPLIES - SAFETY	MO	6,500	3,300	3,500	3,700	3,900	4,100	4,300	4,600	4,900	5,200	
60	SUPPLIES - TRAINING	MO	2,500	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	
61	SUPPLIES - TRAINING	MO	2,500	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	
62	SUPPLIES - VEHICLES	MO	2,000	5,000	5,300	5,600	5,900	6,300	6,700	7,100	7,500	8,000	
63	TELEPHONE & INTERNET	MO	9,700	25,500	27,000	28,600	30,300	32,100	34,000	36,000	38,200	40,500	
64	TELEPHONE & INTERNET	MO	3,750	4,000	4,200	4,500	4,800	5,100	5,400	5,700	6,000	6,400	
65	TRAVEL & TRAINING	SD	4,500	7,000	7,200	7,400	7,600	7,800	8,000	8,200	8,400	8,700	
66	TRAVEL & TRAINING	SD	4,500	7,200	7,400	7,600	7,800	8,000	8,200	8,400	8,700	9,000	
67	UNEMPLOYMENT TAXES	E	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	
68	UNEMPLOYMENT TAXES	E	5,200	5,500	5,700	5,900	6,100	6,300	6,600	6,900	7,200	7,500	
69	UNEMPLOYMENT TAXES	E	3,500	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000	5,200	
70	UNIFORMS	E	2,000	3,900	4,100	4,300	4,500	4,700	4,900	5,100	5,300	5,500	
71	UNIFORMS	E	2,000	3,900	4,100	4,300	4,500	4,700	4,900	5,100	5,300	5,500	
72	UTILITIES	MO	315,000	333,900	353,900	375,100	397,600	421,500	446,800	473,600	502,000	532,100	
73	NEW LOW POINT WWTP - UTILITIES	U	0	289,909	295,707	301,621	307,654	428,350	436,917	445,655	454,569	463,660	
74	NEW CENTRAL WWTP - UTILITIES	U	0	0	380,586	388,198	395,962	403,881	544,131	555,013	566,113	577,436	
75	WORKERS COMPENSATION	E	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	
76	WORKERS COMPENSATION	E	21,200	22,500	23,400	24,300	25,300	26,300	27,400	28,500	29,600	30,800	
77	WORKERS COMPENSATION	E	3,700	3,900	4,100	4,300	4,500	4,700	4,900	5,100	5,300	5,500	
78	WWTP Maintenance (2025)	E	0	0	78,000	81,100	84,300	87,700	91,200	94,800	98,600	102,500	
79	Admin (2025)	E	0	0	70,200	73,000	75,900	78,900	82,100	85,400	88,800	92,400	
80	C&D Lead Sewer (2028)	E	0	0	0	0	0	122,835	127,700	132,800	138,100	143,600	
81	C&D Operator Sewer (2030)	E	0	0	0	0	0	0	0	94,899	98,700	102,600	
82	On-Call Engineering (O&M)	E	0	25,000	26,000	27,000	28,100	29,200	30,400	31,600	32,900	34,200	
83	SCADA Maintenance (O&M)	E	0	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	
84	Total Budget and Projected O&M		2,315,710	3,063,525	4,015,271	4,254,815	4,516,237	5,028,921	5,457,809	5,867,395	6,202,536	6,554,657	



Town of Johnstown  
 Sewer Utility  
 Existing and Proposed Rates

Table B-7

Customer Class	Existing Rate	Proposed Rate
Commercial		
Base Rate, \$ per Bill	\$34.79	\$40.01
Volume Rate, \$ per 1,000 gallons*	\$4.00	\$4.60
Residential		
Base Rate, \$ per Bill	\$34.79	\$40.01
Multifamily		
Base Rate, \$ per Unit per Bill	\$34.79	\$40.01

\*Based on winter water use (Dec - Feb)